

**Tracy Arm – Ford’s Terror & Chuck River
Wilderness Commercial Needs Assessment
Juneau Ranger District
Tongass National Forest**

Executive Summary

This document applies criteria of the Wilderness Act to determine which recreation commercial service activities may be necessary in the Tracy Arm - Ford’s Terror and Chuck River Wilderness Areas. Section 4(d)6 of the Wilderness Act reads:

Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

The preservation of wilderness character is a requirement of Sections 2(a) and 4(b) of the Wilderness Act, and is a critical element in determining which commercial service activities may or may not be compatible in these wilderness areas. There cannot be a need for commercial services that degrades wilderness character: preservation of wilderness character takes precedence as the paramount purpose of the Wilderness Act. Section 2(c) of the Wilderness Act defines wilderness and presents the terms that depict wilderness character.

Section 4(d)6 requires commercial services to realize purposes listed by the Wilderness Act that categorize beneficial uses of wilderness. These purposes, called the public purposes or recreation and wilderness purposes, are listed under Sections 2(c) and 4(b). Section 4(b) affirms that these purposes are subordinate to the primary purpose of preserving wilderness character. A positive determination of need for a recreation commercial service requires the activity realize public purposes while being compatible with preserving wilderness character.

This assessment pertains solely to recreation commercial service activities commonly referred to as commercial outfitting and guiding operations. It does not consider other commercial or noncommercial uses. It concludes with a determination as to whether or not five categories of recreation commercial services are necessary in the Tracy Arm – Ford’s Terror and Chuck River Wilderness Areas. Need was determined with 17 screening questions that assessed commercial service activities against the public purposes and compatibility with preserving wilderness character as defined in the Wilderness Act of 1964 and consistent with the Alaska National Interest Lands Act of 1980 (ANILCA). If recreation or other wilderness purposes are realized while wilderness character is upheld, commercial services may be deemed necessary. The following summarizes the findings:

Determination of Need for Commercial Service Activities:

- *Remote setting nature tour* commercial service activities *are necessary* in the Tracy Arm - Ford’s Terror and Chuck River Wilderness Areas.

- *Floatplane landing tour* commercial service activities *are not necessary* in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.¹
- *Camping* commercial service activities *are necessary* in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.
- *Freshwater fishing* commercial service activities *are necessary* in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.
- *Hunting* commercial service activities *are necessary* in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.

Commercial services may only occur *to the extent necessary* as mandated by Section 4(d)6 of the Wilderness Act. Subsequent site specific commercial use allocation decisions under the National Environmental Policy Act will further define commercial service activities (locations, timing of use, numbers of visitors, etc.) to ensure the preservation of wilderness character.

¹ See p.9 for definition of floatplane landing tour.

I. INTRODUCTION

This document is a wilderness commercial needs assessment for the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas. It applies criteria of the Wilderness Act of 1964 (Wilderness Act) to determine which recreation commercial service activities may be necessary in the Tracy Arm – Ford's Terror and Chuck River Wildernesses.

The need for commercial services is determined by assessing the ability of activities to fulfill the recreational or other wilderness purposes of the Wilderness Act. In addition, commercial service activities must be compatible with preserving wilderness character. A determination of need may be found where activities fulfill public purposes of the Wilderness Act and are compatible with preserving wilderness character. The preservation of wilderness character will also be a critical factor in further defining site-specific constraints in capacity allocation decisions when determining “the extent necessary” for commercial service activities.

This needs assessment is part of a sequential process of administering recreation commercial use on National Forest System lands within wilderness. It only pertains to recreation commercial activities and does not apply to other commercial or non-commercial uses. Other aspects of administering recreation commercial use outside the scope, but tiered to this assessment include:

National Environmental Policy Act (NEPA) requires analysis of any proposed commercial outfitter and guide allocation of the overall recreation capacity. This analysis culminates in a decision that establishes mitigation measures that balance use with protection of the National Forest resource. The decision would define the extent and amount of commercial recreation use to be authorized. This process informs decision makers of choices among alternative courses of action based upon resource capability and public input.

A *prospectus* may be necessary to implement NEPA decisions when demand for commercially guided recreation opportunities exceeds the available capacity. A prospectus requires commercial operators to submit bid applications that meet specific criteria. The Authorized Officer allocates commercial use to businesses that best respond to the criteria.

Special uses permits authorize individual outfitter-guides within the determined allocation and according to established mitigation measures.

This needs assessment:

1. Determines the need for various activities of commercial outfitter-guides based on fulfilling public purposes of the Wilderness Act and compatibility with preserving wilderness character within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.
2. Is an internal analysis.
3. Does not analyze or mitigate potential environmental impacts from commercial outfitting and guiding activities.
4. Does not determine the extent and amount of recreation commercial use that may be authorized.

The assessment considers the entirety of both the Tracy Arm - Ford's Terror and Chuck River

Wilderness Areas.

This is intended to be a living document. It is recognized that wilderness conditions and factors that affect them may change, as may market demands for various commercial service activities. When substantial changes occur in natural systems and/or commercial recreation service markets, this assessment will be updated accordingly.

This needs assessment is organized into five major sections and appendices to include:

- I. **Introduction** – provides the context and scope of this needs assessment.
- II. **Tracy Arm - Ford's Terror and Chuck River Wilderness Areas** – provides brief overview of the areas' wilderness qualities and applicable laws.
- III. **Commercial Service Activities & Public Purposes** – defines the commercial service activities, public purposes and screening questions for determining need.
- IV. **Wilderness Character** – defines wilderness character and provides screening questions to determine compatibility with activities.
- V. **Determination of Need for Commercial Service Activities** – presents findings for determination of need

II. TRACY ARM - FORD'S TERROR AND CHUCK RIVER WILDERNESS AREAS

Tracy Arm - Ford's Terror Wilderness: A Primeval Sanctuary

Behold primordial time itself: a glacier reminding us of an ice age that began over a million years ago. Across the millennia this condensed ice flowed down from the mountains grinding granite into flour. Today, the glacier retreats as it calves icebergs into the sea and continues its centuries-old unveiling of the dramatic fjord it has sculpted. Ancient crumbling ice supports precious new life: a harbor seal pup born minutes ago flops on an iceberg. Eagles descend on the afterbirth and possibly the hapless pup itself. The mother seal squirms to protect her vulnerable newborn. Then she pushes her pup into the water and follows, their awkwardness on ice transformed into aquatic grace.

The fjords of Tracy Arm and Endicott Arm comprise a primeval sanctuary where the ageless cycles of rock and ice and seals and eagles challenge our perceptions. Time is brief and yet eternal. Life is frail yet resilient. The only constant in nature is impermanence.²

From *Human and Natural History in Tracy Arm – Ford's Terror Wilderness*:³

The Tracy Arm-Ford's Terror Wilderness is about forty-five miles southeast of Juneau. It encompasses 653,179 acres of the rugged Coast Mountains bordering Holkham Bay, on the east side of Stephens Passage. It surrounds three dramatic glacial fjords—Tracy and Endicott Arms and Ford's Terror—and extends eastward to the glaciers and high mountains of the Canadian border.

Tracy Arm-Ford's Terror is mountainous and heavily glaciated, with most of its terrain above treeline. Although a few low valleys host mature forest, most land along shore is covered in an early-successional mix of alder, willow and young spruce. Steep shores, swift streams, cliffs, narrow gorges, glaciers and thick vegetation make travel on land difficult. The wilderness has no cabins or maintained trails. However, protected waters, spectacular scenery and small beaches contribute to ideal sea kayaking, if you can stand the rain.

For many visitors this wilderness is all about glaciers, both present and past. In addition to three tidewater glaciers that regularly calve ice bergs into the ocean, its surrounding mountains tell a dramatic story of Pleistocene glaciation, with rounded domes, sheer walls and deep, U-shaped valleys.

Traveling Tracy or Endicott Arms, both about thirty miles long, is like taking a trip back to the Pleistocene Epoch, when huge glaciers covered southeast Alaska. In Holkham Bay, where the arms begin, mature rain forest lines steep shores that have been de-glaciated for thousands of years. Permanent snowfields and a few glaciers cover mountaintops high above the bay. But within the fjords, the snow and ice increase and the forest is noticeably younger, a result of more recent glaciation. Instead of mature spruce and hemlock, thickets of alder and willow dominate the thin soil. A few spruce rise above the thickets, pioneers of the tall forests that will eventually fill the valleys. At the ends of the arms, close to the glaciers, even the alders and willows are rare. The developing soils only support clusters of pioneer plants such as lupine and fireweed. In this raw landscape, the receding glaciers uncover more bare rock and gravel each year.

The landscape also grows more dramatic within the fjords, which reach deep into the Coast Mountains. Some peaks exceed 7,000 feet a little more than a mile from shore. Pleistocene glaciers sculpted them into dramatic nunataks, horns and domes. Most still host permanent snow fields and alpine glaciers.

² JRD Wilderness program specialists' descriptive statement for the Tracy Arm - Ford's Terror Wilderness Area.

³ By Tim Lydon, USFS wilderness ranger.

Tracy Arm-Ford's Terror became part of the Tongass National Forest in the early 1900s. It was designated a National Forest Scenic Area in 1960, after years as a tourist attraction. In 1970 it became a Wilderness Study Area in recognition of its dramatic beauty and opportunities for solitude. In 1980, it was designated wilderness as part of the Alaska National Interest Lands Conservation Act (ANILCA). The law put the area under the authority of the 1964 Wilderness Act.

The wilderness surrounds Tracy Arm, Ford's Terror and most of Endicott Arm and Holkham Bay. The south shore of Holkham Bay and part of Endicott Arm's south shore are part of the adjacent Chuck River Wilderness, designated in 1991.

Chuck River Wilderness: The Promise of Wilderness

Chuck River reflects the rise of wilderness appreciation in modern society. The local Tlingit enjoyed the bounty of nature by trapping and fishing in Windham Bay. Settlers arrived in the 1890's seeking gold. They dug mines into the mountains, laid roads through the forests and built structures along the shore. The mining boom subsided around the 1920's, people moved on and their developments fell into disrepair. In the 1980's, timber resources were marked and potential roads were staked. But before it was logged, the American people embraced a new value - that of wilderness. In order to protect old-growth forest and riparian habitat, Congress designated the Chuck River Wilderness in 1990. The section adjoining the Tracy Arm - Ford's Terror Wilderness completes the protection of spectacular Endicott Arm. Today this wilderness patiently re-wilds its weather-beaten ruins as people treasure it for tranquility, scenic beauty, aged forests, healthy fish runs, hunting opportunities and protected anchorages.⁴

In whole, the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas currently has at least 18 outfitter-guide operations that offer a wide variety of activities including remote setting nature tours (hiking, paddling, exploring, wildlife viewing, etc.), camping, freshwater fishing, and hunting. Currently outfitter-guides are allowed to operate on shore along the entire marine coast of the wilderness area. Only one outfitter-guide, a mountain goat hunting guide, is authorized to operate within the interior lands (generally ½ mile or more from mean high tide) or lakes of the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas due to lack of market demand and appropriate environmental analysis.

The Wilderness Act and the Alaska National Interest Lands Conservation Act

The Wilderness Act authorizes Congress to designate wilderness areas amidst public lands managed by federal agencies. The goal of the Wilderness Act is to secure for present and future Americans the benefits of an enduring wilderness resource. The law achieves this goal by affirming qualities for which wilderness is to be administered and by limiting uses that degrade those qualities.

The passage of ANILCA established 14 wilderness areas on the Tongass National Forest including the Tracy Arm - Ford's Terror Wilderness. The Chuck River Wilderness was designated as part of an amendment to ANILCA passed under the Tongass Timber Reform Act of 1990. ANILCA includes exceptions to the Wilderness Act that apply to Alaskan wilderness areas. Specific sections that apply to the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas and this assessment include:

- Section 1110(a) allows for the use of airplanes, motorboats, and snowmachines (during

⁴ JRD Wilderness program specialists' descriptive statement for the Chuck River Wilderness Area.

periods of adequate snow).

- Section 1303(b)(3) allows for the establishment and continued use of existing administrative sites and visitor facilities.
- Section 1307(a) allows for the continuance of visitor services that were operating on January 1, 1979 in designated conservation system areas (including the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas); however, there are no present day commercial operations that were authorized use within the bounds of the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas on that date.
- Section 1315(d) allows for construction of new cabins if necessary for the protection of public health and safety.
- Section 1316 (a) allows, subject to reasonable regulation to insure compatibility, for existing uses and future establishment, and use, of temporary campsites, tent platforms, shelters, and other temporary facilities and equipment directly and necessarily related to taking of fish and wildlife.
- Section 1316(b) allows for the denial of the temporary facilities if the use of equipment or facilities is determined to be detrimental to the wilderness character.

Other than the exceptions expressed in ANILCA, commercially guided uses within Tracy Arm - Ford's Terror and Chuck River Wilderness Areas are administered according to the Wilderness Act of 1964 (ANILCA Section 707).

The principle administrative charge of the Wilderness Act is to preserve wilderness character. Agencies have defined wilderness character using the descriptive aspects found within the law:

- untrammeled
- undeveloped
- natural
- outstanding opportunities for solitude or a primitive and unconfined type of recreation, and
- unique features of ecological, geological or other features of scientific, educational, scenic or historical value.

Generally speaking, actions or uses that are compatible with these qualities may be allowed in wilderness.

The Wilderness Act also limits uses that would degrade the qualities of wilderness character. With specific exceptions, it prohibits commercial enterprise, permanent roads, and except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act, temporary roads, motor vehicles, motorized equipment or motorboats, landing of aircraft, other forms of mechanical transport, or installations and structures.

Commercial services, the subject of this needs assessment, are one of the possible exceptions to the prohibition on commercial enterprise per Section 4(d)6 of the Wilderness Act:

Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.⁵

⁵ Wilderness Act, 16 USC 1133(d)(5).

III. COMMERCIAL SERVICE ACTIVITIES & PUBLIC PURPOSES

The Wilderness Act was redrafted sixty-five times with intense scrutiny on its wording. The deliberate language of Section 4(d)6 reflects this extensive editing. An examination of its specific language is merited.

The following sections interpret Section 4(d)6 of the Wilderness Act and discuss how it applies to outfitter-guide services in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas:

- (1) Commercial services
- (2) may be performed
- (3) within the wilderness areas designated by this Act
- (4) to the extent necessary
- (5) for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

(1) Commercial services

The Code of Federal Regulations provides guidance as to the scope of commercial services to be considered under Section 4(d)6 by stating that:

The Chief, Forest Service, may permit . . . commercial services within National Forest Wilderness to the extent necessary for realizing the recreational or other Wilderness purposes, which include, but are not limited to, the public services generally offered by packers, outfitters, and guides.⁶

Outfitter-guide services addressed in this needs assessment include remote setting nature tours (hiking, paddling, skiing, wildlife viewing, photography, exploring, sightseeing, cultural tours, etc.), floatplane landing tours, camping, freshwater fishing, and hunting. These services represent the range of activities currently popular with the public who visit the Tongass National Forest. Not all of these activities are currently authorized within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas, but they represent reasonably foreseeable future demands for services. Outfitter-guide activities that are currently not authorized by the Forest Service in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas include skiing and floatplane landing tours.

(2) May Be Performed

The word "performed" means "to carry out or fulfill" and is accomplished by guide services under permit from the Forest Service. The word "may" has a specific legal meaning: "action is optional."⁷ Hence the managing agency or authorized line officer may opt to permit or not to permit commercial services, or to permit some services but not others.

(3) Within Wilderness Areas Designated By This Act

This language refers to the Wilderness Act and subsequent enabling wilderness legislation, such as ANILCA, which designated the Tracy Arm - Ford's Terror Wilderness, and the TTRA which designated the Chuck River Wilderness as an amendment to ANILCA.

⁶ 36 CFR 293.8, Permanent structures and commercial services.

⁷ Forest Service Manual, 1110 Directives, exhibit 1110.8.

(4) To The Extent Necessary

The overriding constraint on commercial services (and all types of visitor use) in wilderness is the mandate to preserve wilderness character. Human influences that impair wilderness character are to be minimized so that the natural conditions are protected, and the benefits of the wilderness resource (social, biological, and physical) are available to future generations. The phrase “to the extent necessary” has been subject to court arguments where the prevailing ruling mandates this to be a minimizing provision, which aligns with the overall limitations on commercialism instituted by the Wilderness Act.

“Extent” means “scope” or “magnitude.”⁸ The scope or magnitude of commercial services can be gauged quantitatively (the number of permits issued; the number of commercial clients authorized), spatially (where operations are necessary or authorized) and temporally (when operations are authorized). Extent is further defined and constrained by the capacity or capability of the wilderness to support the activity without impairment to wilderness character.

Commercial service activities are “necessary” if they are found to achieve the public purposes of wilderness without impairment of wilderness character.

(5) For Activities Which Are Proper for Realizing the Recreational or Other Wilderness Purposes of the Areas

Proper activities are those that are compatible with the goals of the Wilderness Act. The paramount goal is the preservation of wilderness character. This includes the use and enjoyment of wilderness by present and future generations. Commercial services can fulfill both stewardship and service roles by engaging in proper and purposeful activities.

Activities conducted responsibly would preserve the integrity of the wilderness resource. At a minimum, such activities would embrace outdoor ethics to minimize impacts and avoid prohibited means that degrade wilderness character, excepting allowable ANILCA stipulations. The stewardship role can be filled further by actively educating clients regarding conservation issues and the benefits of wilderness, as well as by actively involving clients in citizen science projects to help administer wilderness.

Activities enhance people’s use and enjoyment of wilderness when wilderness or recreation purposes are realized. Regarding the commercial service activities, this needs assessment examines five broad categories that encompass the spectrum of commercial outfitting and guiding operations: remote setting nature tours; floatplane landing tours; camping; hunting, and freshwater fishing. These activities may be provided if determined to be compatible with the outstanding opportunities for solitude or a primitive and unconfined type of recreation the Wilderness Act seeks to provide. Outfitter-guides play a meaningful role in teaching the skills necessary to enjoy historic and recreational pursuits, in interpreting the scenic, scientific, educational, conservation and historical values of the visited wilderness area and in training visitors to be good stewards of wilderness.

This section concludes with examining in greater detail:

⁸ Webster’s 9th New Collegiate Dictionary, 1990, page 440.

- Commercial Outfitter and Guide Service Activities
- Recreational or Other Wilderness Purposes

Commercial Outfitter and Guide Service Activities

Activities considered in this needs assessment are those that occur above mean high tide on National Forest System lands. Not included are strictly point-to-point transportation services that are not a tour or part of a package trip. Many activities that take place within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas above mean high tide are done in combination with activities outside the wilderness on state jurisdiction submerged lands and marine waters. The activities considered in this needs assessment include: 1) remote setting nature tours; 2) floatplane landing tours; 3) camping; 4) freshwater fishing, and 5) hunting.

Remote setting nature tours encompass, but are not limited to, a wide variety of day use activities such as hiking, paddling, skiing, wildlife viewing, photography, exploring, sightseeing, and cultural tours. All of these activities, except skiing, are popular with wilderness visitors and offered by commercial service providers within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas. The size of these day use groups tends to be the largest of all activities (group size in wilderness is capped at a maximum of 12 people per group). Visitors may spend from one to several hours participating in these activities. Desirable attributes for these activities include accessible sections of shoreline and unique features of geological, ecological or cultural interest. Specific areas within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas that are popular for these activities include the shores near the Dawes Glacier, North Dawes Inlet, Sanford Cove, Wood Spit and the south shore of Holkham Bay, with other shores, streams and bays attracting occasional interest. Access to the wilderness and along adjacent marine waters is achieved by boat, aircraft or paddle craft. Travel within the wilderness is typically by foot.

Floatplane landing tour activities are common in other parts of the Tongass National Forest, but are not traditional or currently authorized within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas. A floatplane landing tour is defined in this assessment as a day-use activity that predominantly involves a substantial portion of the tour viewing natural features by air and landing once or multiple times within the wilderness and returning back to its point or vessel of origin. It typically involves a party of six to twelve people who spend little time on land and most of the time in the air flightseeing. The definition of a floatplane landing tour does not include point-to-point floatplane transport.

Camping is defined as overnight use within the wilderness. Daytime activities associated with camping may involve boating or kayaking on marine waters or remote setting nature tours, hunting or freshwater fishing within the wilderness. This use depends on sites amenable to camping such as level ground, accessible beach, availability of water, secure boat anchorage or storage, a food cache site and so on. Popular camping locations feature accessible marine shoreline which can be severely limited by steep-walled fjords or sheer shorelines. This limited geographic availability combined with commonly desired destinations (e.g. glaciers, bays, islands) concentrates camping use in certain sites. This concentration of use creates impacts to the natural resource and to the areas' outstanding opportunities for solitude. Camping use within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas can be characterized as

moderate and concentrated. It should be noted that there is significant camping use by noncommercial sea kayaking groups.

Freshwater fishing includes both catch-and-take and catch-and-release methods under state sport fishing regulations (excludes commercial and subsistence fishing). This use depends on places and times where anadromous and resident fish are located. Freshwater fishing activities may be day use, or encompass multiple days. Anglers tend to seek out areas with more solitude and their group sizes are typically smaller than those of remote setting nature tour user groups. There has been almost no guided freshwater fishing in the Tracy Arm - Ford's Terror Wilderness as there are much better fishing options elsewhere than the glacial fjords. There has been slightly more (but still little) guided freshwater fishing within the Chuck River Wilderness as this area has a few rivers running out of old-growth forest.

Hunting includes the hunting of brown bear, black bear, mountain goats, deer, and waterfowl. This use depends on places and times where game occur and must comply with state regulations. State regulations require a registered guide or resident kin for nonresident big game hunters. Additionally, hunting requires a high degree of solitude for safety and practical reasons (undisturbed wildlife). This need for solitude combined with the limited number of sheltered bays / safe anchorages in the Tracy Arm – Ford's Terror and Chuck River Wilderness Areas limits the number of commercial hunting guides that can operate at the same time without impinging on each other's or noncommercial users' operations. Guided hunting use typically reflects a boat-based guiding operation that thoroughly explores a bay, fjord or an expanded area of marine shoreline for the duration of the hunt. Currently there is only one outfitter-guide authorized to use an alpine camp as their base of operations. Groups tend to be smallest in size (average of 1.8 clients per group) to minimize disturbance and competition and to maximize chances of success. Hunting seasons vary by species but generally speaking are open for spring, fall and some summer months and are closed during the peak of summer and for the winter.

Recreational or Other Wilderness Purposes

Activities provided by outfitter-guides in wilderness must support the recreational or other wilderness purposes as defined in the Wilderness Act and enabling legislation. The "recreational or other wilderness purposes" clause refers to uses supported in the Wilderness Act:

Except as otherwise provided in this Act, **wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.**⁹
[emphasis added]

Collectively, these purposes may be referred to as the public purposes of the Wilderness Act.

ANILCA describes similar purposes and values:

§101. (a) In order to preserve for the benefit, use, education and inspiration of present and future generations certain lands and waters in the State of Alaska that contain nationally significant natural, scenic, historic, archeological, geological, scientific, wilderness, cultural, recreational, and wildlife values, and units described in the following titles are hereby established.

⁹ Wilderness Act, 1964, 16 USC 1133(b).

These values are covered within the public purposes of the Wilderness Act examined here and within the wilderness character qualities examined later.

The Wilderness Act provides for certain limitations on commercial ventures. Commercial services in wilderness must realize the public purposes of wilderness identified in the law. Drawing a clear connection between commercial service activities and purposes is the basis of determining the need for commercial services. The Wilderness Act does not specify how many public purposes must be realized. Those commercial services that realize the most public purposes without impairing wilderness character would be the most compatible with wilderness according to the criteria of the law.

Broadly speaking, activities provided by commercial services for realizing public purposes will expand the capacity of the managing federal agency to administer wilderness areas “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness....”¹⁰ Fulfillment of these purposes are further achieved by reviewing operating plans, and completing field inspections and/or client evaluations. More specifically, each purpose must be discussed individually to assure common understanding as to what realizing the purpose means. Descriptions of the public purposes and the screening questions for realizing them in the Tracy Arm - Ford’s Terror and Chuck River Wilderness Areas follow.

Recreational

The recreational use purpose of wilderness includes participation and/or instruction in traditional wilderness activities such as hiking, backpacking, canoeing, skiing, wildlife viewing, hunting, and fishing in an unconfined primitive setting that provides opportunities for solitude. There is a distinct qualitative aspect to the recreational purpose of wilderness:

An area of wilderness if further defined to mean in this Act an area ... which ... has **outstanding opportunities for solitude or a primitive and unconfined type of recreation**¹¹ [emphasis added]

National Forest Wilderness resources shall be managed to promote, perpetuate, and, where necessary, restore the wilderness character of the land **and its specific values of solitude, physical and mental challenge**, scientific study, **inspiration, and primitive recreation**.¹² [emphasis added]

This qualitative aspect is realized if outfitter-guides offer activities in a manner that clients can enjoy outstanding opportunities for solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge.

Wilderness in Alaska can be very remote, challenging and not easily accessible to the general public. Specialized skills, knowledge and equipment are often required for access to recreation

¹⁰ Wilderness Act, 1964, 16 USC 1131 (a).

¹¹ Wilderness Act, 1964, 16 USC 1131(c).

¹² Title 36, Code of Federal Regulations, Part 293.2.

activities within Alaska wilderness areas. Outfitter-guides offer the opportunity to fulfill the recreation purposes of the Wilderness Act by providing services that assist in overcoming extraordinary challenge and allow the general public to access recreation opportunities. Aspects to consider are the technical and specialized needs to access wilderness and the distance from population centers.

Recreational purpose screening questions:

Rp1 - Do the commercial service activities require a substantial degree of specialized skill, equipment and involve challenges that inhibit access and enjoyment by the majority of the general public?

Rp2 - Do the commercial service activities align with traditional wilderness pursuits?

Scenic

The scenic purpose covers appreciation of the natural grandeur of the wilderness, including landscape, soundscape, flora and fauna. Commercial services may offer activities that support this purpose by allowing clients to appreciate these wild sights and sounds on their own terms. The opportunity to view these natural wonders often invokes a sense of inspiration within. It allows visitors to experience being a part of something much bigger, more complex and intangible.

Scenic purpose screening questions:

Sp1 - Do the commercial service activities enhance clients' appreciation of the aesthetics of the wilderness?

Sp2 - Do the commercial service activities invoke opportunities for inspiration and/or allow for deep connections with nature uninhibited by modern civilization?

Scientific

Activities offered by commercial outfitter-guide services may be able to assist with research studying wildlife, vegetation, geology or other aspects of wilderness. "Citizen Science" trips embody this purpose well. Outfitter-guide activities might assist State Fish & Game Departments or other organizations with animal studies, either reporting field observations or providing mandatory or voluntary harvest information. Activities should offer clients the opportunity to be involved in scientific study to the greatest degree possible.

Scientific purpose screening questions:

Scp1 - Do the commercial service activities provide opportunities to assist with scientific studies or involve the scientific process of studying nature?

Educational

A key role of the outfitter-guide is to enhance client enjoyment and use of wilderness. This entails a teacher-student relationship that imparts knowledge and skills from the outfitter-guide to clients, and includes interpretation which forges emotional connections between clients and nature.

Commercial service activities may realize the educational purpose by educating clientele about the purpose and value of wilderness. Tongass National Forest policy requires all wilderness commercial service providers to educate their clients about the history, purpose and values of the National Wilderness Preservation System as well as the specific wilderness area visited.

Effective teaching occurs with the realization that wilderness offers an array of educational opportunities spanning the human and natural history of our country. Outfitter-guides can teach their clients skills, arts, history, biology, geology and other topics during wilderness excursions. Teaching occurs by connecting clients to nature, mentoring them and expanding their understanding and appreciation.

Often, outfitter-guides use the art of interpretation to engage with clients about the natural wonders. Interpretation is more than merely providing facts such as the names, elevations and ages of distinct features. Interpretation seeks to forge emotional connections to nature through direct experience that fosters appreciation of natural systems and by encouraging people to record their appreciation through photos, paintings, writings or other expressions.

Educational purpose screening questions:

Ep1 - Do the commercial service activities offer opportunities for education and interpretation about certain values of the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas such as cultural, ecological or geological in a way that fosters connections to nature?

Conservation

The conservation purpose may be realized from activities that provide local and global perspectives on conservation issues. The first ensures that activities are conducted in such a way that the wilderness resource remains unimpaired for present and future generations. This can be accomplished by adhering to laws and regulations and by practicing outdoor ethics that protect the wilderness character. Outfitter-guide activities should offer opportunities to not only adhere to regulations and ethics, but provide explanation as to why such regulations and ethics are in place.

Examples of local conservation regulations and ethics include: state statutes that govern hunting and fishing in order to maintain sound populations, permit requirements that prevent overcrowding and resource damage, Leave No Trace practices, proper hunting and fishing ethics and proper wildlife viewing ethics such as marine mammal viewing guidelines.

The second means of realizing the conservation purpose is to educate clients about the valuable and positive role of wilderness on a planet experiencing climate change, mass extinction, biodiversity loss, habitat fragmentation, pollution and other serious plights. The Tracy Arm - Ford's Terror Wilderness features some of the fastest wasting glaciers on earth; the Chuck River Wilderness features old-growth forest once slated for logging and re-wilded settlements. These provide opportunities to measure human impact on the environment and to contemplate nature's resiliency. Outfitter-guides may offer activities that educate their clients as to how the values of wilderness extend beyond the immediate personal experience to benefit the broader world community and future generations.

Citizen stewardship activities realize the conservation purpose to an even greater degree by participating in wilderness stewardship. These can range from beach clean-ups to treating invasive weeds to trail maintenance to monitoring solitude. There are numerous ways in which commercial service activities can assist agency wilderness stewardship objectives.

Conservation purpose screening questions:

- Cp1 - Do the commercial service activities adhere to outdoor ethics that protect and support wilderness character?
- Cp2 - Do the commercial service activities provide opportunities for clients to learn why certain laws, regulations and ethics are in place for conservation concerns?
- Cp3 - Do the commercial service activities offer opportunities to engage in citizen stewardship projects and/or provide context to larger world conservation concerns?

Historical

Commercial service activities may realize the historical purpose of wilderness in two manners: by assisting with archeological endeavors and/or by connecting people to the human roots of an area. Participating in archeological endeavors should always involve authorized archeologists. It could include projects such as restoring a historical site or methodically inventorying and recording an area for signs such as pictographs or petroglyphs. It should be recognized that it is important to respect local and/or indigenous concerns and that it is inappropriate to publicize certain archeological sites.

Regarding connecting people to their roots, activities can offer clients opportunities to learn about the human history of an area, from the indigenous peoples to explorers to settlers to contemporary locals. History can be taught through lectures, story-telling, books, maps and photos or local experts. Additionally, for those historic sites protected from disturbance which are visited by commercial operations, the outfitter-guides take a stewardship role to preserve the integrity of the site by protecting site qualities and reporting any disturbances.

Historical screening questions:

- Hp1 – Do the commercial service activities offer opportunities to foster a connection between local human habitation and use of the wilderness and its other ecological values?

IV. WILDERNESS CHARACTER

In order to determine need, commercial outfitter-guide service activities must also be compatible with the preservation of wilderness character as defined in the Wilderness Act. This assessment describes the wilderness character for the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas and determines whether the outfitter-guide activities are compatible with their preservation for future generations.

This assessment determines compatibility with the Wilderness Act and screens out inappropriate activities; it does not analyze the effects of outfitter-guide activities on wilderness character. That analysis is reserved for an environmental analysis, which will be used to define site specific constraints (i.e. locations, group sizes, service days, time restrictions, etc.) to further define 'the extent necessary' to preserve wilderness character.

Wilderness character is a complex idea. It considers a wide variety of qualities, local and national, tangible and intangible. Federal land management agencies charged with administering wilderness have identified five qualities that comprise wilderness character, largely taken from the Wilderness Act Section 2(c):

1. Natural
2. Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation
3. Undeveloped
4. Untrammeled
5. Other features of value

In order to preserve wilderness character, the characteristics and values of the individual wilderness area must also be further defined and sustained. The characteristics and values which articulate wilderness character for the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas are described in ANILCA Section 101(b):

It is the intent of Congress in this Act to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species of inestimable value to the citizens of Alaska and the Nation, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems, to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on freeflowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems.¹³

This assessment is organized to consider the wilderness character for the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas under each nationally defined quality. Like the previous section, each wilderness character quality will conclude with a screening question used to determine the need for commercial service activities.

¹³ The Alaska National Interest Lands Conservation Act, 1980, Section 101(b).

Natural

The natural quality refers to the condition of the biotic and environmental elements of wilderness:

1. **Natural.** Wilderness ecological systems are substantially free from the effects of modern civilization. This quality is degraded by many things, such as loss of indigenous species, occurrence of nonindigenous species, alteration of ecological processes such as waterflow and fire regimes, effects of climate change, loss of dark skies, and occurrence of artificial sounds. It is preserved or improved, for example, by controlling or removing nonindigenous species or restoring ecological processes.¹⁴

The Tracy Arm - Ford's Terror and Chuck River Wilderness Areas covers ecosystems from the austere Stikine Icefield to old growth forests. Wildlife populations range from terrestrial mammals such as black and brown bear, Sitka black-tailed deer, mountain goat, gray wolf and river otter to sea birds, waterfowl and shorebirds such as marbled and Kittlitz murrelets, loons, scoters, oystercatchers, arctic terns and gulls to fish including all five salmon plus cutthroat and steelhead trout to amphibians such as boreal toads and various newts. Marine mammals plying the adjoining waters include humpback whales, orca, harbor seals, Steller sea lions and harbor porpoises.

Key ecological processes include:

- Harbor seals returning to Tracy and Endicott Arms in the hundreds every summer to haul out in front of the glaciers on ice floes to birth and nurse pups and to molt.
- Arctic terns returning each summer to nest in colonies in the gravelly moraines of the glaciers.
- Oystercatchers nesting on the ground and gulls nesting in cliff colonies.
- Bears feeding in the intertidal zone in late spring to get calories after the long winter and before the vegetation returns and then feeding on salmon runs in the late summer.

There may be plant species that are officially listed as threatened and endangered in the Tracy Arm – Ford's Terror wilderness areas, but none have been found yet. Invasive plants are limited to localized patches in areas of historic human settlement.

Absent human influence, air quality is high. Stream water quality is believed to be high. Undeveloped watersheds, continuous flushing from rainfall and freezing winter temperatures contribute to purity. Soils range from recently de-glaciated bare rock to newly established thin soils to thick organic soils in the older forests.

Challenges to naturalness include:

- Tourism operations interfering with wildlife by getting too close.
- Powered vessels impairing air quality and the natural soundscape.
- Denuding of thin soil bases in recently de-glaciated areas by concentrated use.
- Climate change impacts altering ecosystems (e.g. glacial wasting; yellow cedar dying off; warming rivers no longer supporting salmon reproduction)

¹⁴ Landres, P., Vagias, W. & Stutzman, S. *Using wilderness character to improve wilderness stewardship*. Park Science, Volume 28, Number 3, Winter 2011-2012, ISSN 1090-9966. National Park Service, U.S. Department of the Interior, Natural Resource Stewardship and Science, Office of Education and Outreach, Lakewood, Colorado.

Outfitter-guide services play an important role in protecting natural aspects of Tracy Arm - Ford's Terror and Chuck River Wilderness Areas by respecting wildlife and by helping clients to understand wildlife sensitivities, game laws, and best management practices. Outfitter-guides can also help prevent the spread of invasive species and impacts to sensitive soils and vegetation. Outfitter-guides can also take measures to uphold clean air and the natural soundscape.

Natural character screening question:

Nc1 - Are commercial service activities compatible with preserving the natural character of Tracy Arm - Ford's Terror and Chuck River Wilderness Areas?

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

As already noted under "Purposes" of Wilderness, Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation help define wilderness character and are affected by management decisions in the following way:

2. **Solitude or a primitive and unconfined type of recreation.** Wilderness provides outstanding opportunities for solitude or primitive and unconfined recreation. This quality is primarily about the opportunity for people to experience wilderness, and is influenced by settings that affect this opportunity. It is preserved or improved by management actions that reduce visitor encounters and signs of modern civilization inside the wilderness. In contrast, this quality is degraded by agency-provided recreation facilities, management restrictions on visitor behavior, and actions that increase visitor encounters.¹⁵

For the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas it is uncommon, though not rare, to encounter someone ashore; nonetheless, solitude has been impaired. The constrained waterways – tight fjords, narrow channels and intimate bays – place the off-forest marine traffic in close quarters with on-forest wilderness visitors. The effect is that encounters recorded here by wilderness users are often rated as having more impact than similar distance encounters elsewhere. The loss of outstanding opportunities for solitude is a serious degradation and continuing threat facing the Tracy Arm – Ford's Terror and Chuck River wilderness areas. For the first wilderness, there is a constant presence of people where guided recreation is growing in popularity, where engine noise carries far over water and echoes off granite walls, where public address announcements can be heard over three miles from the ships broadcasting them and where haze from emissions lingers. For the latter wilderness, the south shore of Holkham Bay, Sanford Cove and Windham Bay are increasingly popular anchorages for vessels offering commercial tours and the private lodge in Windham Bay may invite increased use.

The wilderness staff actively monitor for conditions of solitude. These areas where this aspect of wilderness character has been lost or is threatened will be considered in future NEPA decision making processes.

Regarding Primitive and Unconfined Type of Recreation indicators, for the Tracy Arm – Chuck River wilderness areas there has been little change in recent years. There are no cabins, shelters or outhouses in the wilderness areas. The single trail up from Windham Bay to Taylor Lake has

¹⁵ Landres, P., Vagias, W. & Stutzman, S. *Using wilderness character to improve wilderness stewardship*. Park Science, Volume 28, Number 3, Winter 2011-2012, ISSN 1090-9966. National Park Service, U.S. Department of the Interior, Natural Resource Stewardship and Science, Office of Education and Outreach, Lakewood, Colorado.

been buried under a massive landslide and flooded by diligent beavers; there is no intention of re-creating it. Two food-storage cables have been fixed in Ford's Terror in areas popular with campers and bears, but lacking in trees adequate for caching food. Primitive and Unconfined Recreation Opportunities abound.

Outfitter-guide activities can enhance the wilderness experience quality for visitors, contributing to people's use and enjoyment of wilderness, and mitigate visitor impacts leaving such outstanding opportunities unimpaired. Where commercial service activities occur often, in numbers, or with a large footprint (spread out, loud noise, bright lights, lingering exhaust), the outstanding opportunities for solitude or a primitive and unconfined type of recreation quality suffers. A recent threat analysis prepared for Tracy Arm - Ford's Terror and Chuck River Wilderness Areas noted,

Activities authorized under special use permit, as well as those occurring adjacent to wilderness on the marine waters or inholdings, add more visiting parties to the landscape. Increased visitor presence and the haze produced by cruise vessels affect the **outstanding opportunities** for solitude or primitive and unconfined recreation.¹⁶

Outstanding opportunities for solitude or a primitive and unconfined type of recreation character screening questions:

Oc1 - Are commercial services activities compatible with preserving opportunities for solitude, challenge, decision-making and self-reliance?

Oc2 – Are commercial service activities compatible with preserving primitive or unconfined type of recreation experiences?

Undeveloped

The undeveloped quality is essential to primeval wilderness which contrasts with those areas where expanding settlement and growing mechanization have occupied and modified the land:

3. **Undeveloped.** Wilderness retains its primeval character and influence and is essentially without permanent improvement or modern human occupation. This quality is influenced by what are commonly called the "Section 4c prohibited uses," that is, the presence of modern structures, installations, habitations, and use of motor vehicles, motorized equipment, or mechanical transport. The removal of structures and not conducting these prohibited uses preserve or improve this quality. In contrast, the presence of structures and prohibited uses degrades this quality, whether by the agency for administrative purposes, by others authorized by the agency, or when there are unauthorized uses.¹⁷

ANILCA specifically allowed for the continued use of airplanes, motorboats, and snowmachines (during periods of adequate snow cover) for traditional activities and travel to and from villages and homesites. These ANILCA exceptions do not alone constitute a degradation of the Undeveloped Quality.¹⁸

¹⁶ Tracy Arm - Ford's Terror and Chuck River Wilderness Areas Information Needs Assessment, 2011.

¹⁷ Landres, P., Vagias, W. & Stutzman, S. *Using wilderness character to improve wilderness stewardship*. Park Science, Volume 28, Number 3, Winter 2011-2012, ISSN 1090-9966. National Park Service, U.S. Department of the Interior, Natural Resource Stewardship and Science, Office of Education and Outreach, Lakewood, Colorado.

¹⁸ Note, however, that noise, lights and emissions from such modes of transportation may degrade outstanding opportunities for solitude. Lower profile vehicles are more conducive to preserving wilderness character in this

Indicators for the Undeveloped Quality relate to the presence/absence of constructs and uses reflecting modern development rather than primeval wilderness. In terms of structures and installations on national forest system land, the Tracy Arm – Ford’s Terror and Chuck River wilderness areas are largely undeveloped save for ANILCA-allowed navigational aids and scattered USGS survey markers.¹⁹ The Beezer Mountain radio repeater lies just outside the wilderness boundary and the communication site on Dry Mountain is also outside of wilderness.

Regarding inholdings, there are a few areas of non-national forest land in the Tracy Arm – Ford’s Terror wilderness area that could potentially be developed to the detriment of the wilderness character. The Chuck River wilderness area has several developed inholdings, including a waterfront lodge. The Forest Service has acquired some inholdings from willing sellers; however new owners with strong tourism industry connections have recently purchased the lodge. Renovation and new construction could further impair the Undeveloped Quality of the surrounding area (and associated use and effects might comprise additional impacts, as well as afford new opportunities to realize educational, recreational and experiential benefits).

Undeveloped character screening question:

Uc1 - Are commercial services activities compatible with the preserving the undeveloped character by not relying on developments or motorized equipment and mechanical transport not specifically allowed under ANILCA?

Untrammeled

“Untrammeled” is also defined as “unfettered”:

4. **Untrammeled.** Wilderness is essentially unhindered and free from the actions of modern human control or manipulation. This quality is influenced by any activity or action that controls or manipulates the components or processes of ecological systems inside the wilderness. Management actions that are not taken support or preserve the untrammeled quality, while actions that are taken degrade this quality, even when these actions are taken to protect resources, such as spraying herbicides to eradicate or control nonindigenous species or reducing fuels accumulated from decades of fire exclusion.²⁰

ANILCA allows a few exceptions for actions that may impair the untrammeled wilderness character quality, such as fish habitat enhancement.

Regarding the Tracy Arm – Ford’s Terror and Chuck River wilderness areas, outfitter-guides generally do not intentionally control or manipulate ecological systems or their constituents. Commercial operators may affect wildlife, vegetation, air quality and other natural aspects, but these impacts are considered under the natural quality of wilderness character.

Some commercial operators have expressed interest in assisting in USFS-led weed pulls to eradicate invasive weeds. Such instances would impinge the untrammeled quality, but likely be

regard. This is not much different than noting that while people may visit wilderness, at a certain magnitude (of numbers or concentration), crowdedness degrades solitude.

¹⁹ Recreational structures and installations are considered under Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation.

²⁰ Landres, P., Vagias, W. & Stutzman, S. *Using wilderness character to improve wilderness stewardship*. Park Science, Volume 28, Number 3, Winter 2011-2012, ISSN 1090-9966. National Park Service, U.S. Department of the Interior, Natural Resource Stewardship and Science, Office of Education and Outreach, Lakewood, Colorado.

offset by the positive benefits to naturalness and the realization of conservation and education purposes.

Untrammeled Character question:

Utcl - Are commercial service activities compatible with preserving unhindered natural processes that are free from human control or manipulation?

Other Features of Value

The quality Other Features of Value pertains to distinct features fundamental to the wilderness character that are not contained within the other qualities:

5. **Other features.** This aspect is based on the last clause of Section 2c in the 1964 Wilderness Act, that a wilderness “may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” This fifth quality is unique to an individual wilderness based on the features that are inside that wilderness. These features typically occur only in specific locations within a wilderness and include cultural resources, historical sites, paleontological sites, or any feature not in one of the other four qualities that has scientific, educational, scenic, or historical value. While many different types of features could be included, the intent is to include those that are significant or integral to the park and wilderness. Features mentioned in park or wilderness enabling legislation would likely qualify, such as the historic sites in Death Valley Wilderness and volcanoes in Katmai Wilderness. Likewise, significant cultural sites, whether mentioned in enabling legislation or not, occur in most wildernesses and have scientific, educational, scenic, or historical value.²¹

The history of Tracy Arm – Ford’s Terror and Chuck River Wildernesses includes cultural sites and subsistence uses intrinsic to the history and identity of its people. Former settlement sites related to native Alaskans, miners and fox farmers have been identified in the Tracy Arm – Ford’s Terror and Chuck River Wildernesses – and large areas still remain uninventoried by archeologists. Subsistence opportunities exist for seal, mountain goat, bear, deer, smaller furbearers, salmon, berries and other resources.

Professional outfitter-guides and properly managed commercial services may help protect cultural sites and artifacts and uphold subsistence opportunities. Conversely, improperly managed or conducted commercial operations may damage such sites or artifacts through negligence or abuse. Guides may also impact subsistence opportunities if their operations result in:

- Reduction in resources available for subsistence
- Major redistribution of resources
- Substantial interference with access to resources
- Major increases in the use of subsistence resources by nonrural residents²²

Commercial services should only occur if they are compatible with upholding these Other Features of Value for the Tracy Arm – Ford’s Terror and Chuck River Wilderness Areas.

²¹ Landres, P., Vagias, W. & Stutzman, S. *Using wilderness character to improve wilderness stewardship*. Park Science, Volume 28, Number 3, Winter 2011-2012, ISSN 1090-9966. National Park Service, U.S. Department of the Interior, Natural Resource Stewardship and Science, Office of Education and Outreach, Lakewood, Colorado.

²² Region 10 Amendment 2090.23-2006-1, 2006, Forest Service Handbook 2090.23, Chapter Zero Code, page 5.

Other Wilderness Character screening question:

Ovc1 - Are commercial service activities compatible with the preservation of cultural values, sites and subsistence?

Ovc2 – Are commercial service activities compatible with the preservation of prominent ecological, geological and scenic features identified in the Tracy Arm – Ford’s Terror and Chuck River Wilderness Areas?

V. DETERMINATION OF NEED FOR COMMERCIAL SERVICE ACTIVITIES

The following section examines the commercial services by activity for the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas. Each activity was subjected to the public purpose and wilderness character screening questions. In order for a positive determination of need, the recreation commercial service activity must realize recreation or other wilderness purposes and be compatible with preserving wilderness character. Appendix 1 provides a compilation of all the screening questions and a matrix that displays the results of the screening questions by activity.

Remote Setting Nature Tours

Remote setting nature tour commercial service activities are necessary in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.

Hiking, wildlife viewing, photography and sightseeing are popular activities, especially along the marine shorelines of Tracy Arm - Ford's Terror and Chuck River Wilderness Areas. The glacial fjords offer world class opportunities to witness tidewater glaciers, sculpted fjords and how life succeeds an ice age. Scenic vistas and wildlife observations are normally the highlights of such trips, and clients are often given opportunities to contemplate and appreciate nature. The experiences that result often forge deep connections to nature that inspire photographs and art. Guides can help clients understand the regulations and ethics surrounding the viewing of wildlife. Commercially guided trips sometimes involve archaeologists or historians to connect human habitation to the broader ecology. Hiking is a traditional pursuit that requires elements of risk and challenge, especially off-trail. It encourages self-reliance and helps strengthen independent decision-making. Hiking guides can also help preserve wilderness through avoidance of motorized equipment and mechanical transport, and by not competing for subsistence resources. Remote setting nature tour commercial service activities fulfill the public purposes and are compatible with preserving the wilderness character as defined by the Wilderness Act.

Floatplane Landing Tours

Floatplane landing tour commercial service activities are not necessary in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.

Floatplane landing tour activities are common in other parts of the Tongass National Forest, but are not traditional or currently authorized within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas. A floatplane landing tour is defined in this assessment as a day-use activity that predominantly involves viewing natural features by air and landing once or multiple times within the wilderness. The definition of floatplane landing tours does not include point-to-point floatplane services that are provided as an ancillary service to other guides who are permitted for other activities or for services to individuals who hire these services to provide access to these areas for their recreation needs, such as using a cabin, or shuttle services to and from a community.

The determination of no need was concluded based on Public Purpose Screening Questions Rp2-Traditional, Sp2-Inspirational and Cp3-Stewardship; and Wilderness Character Screening Questions Nc1-Natural, Oc1-Solitude and Oc2-Primitive. Compared to other activities examined in this assessment, floatplane landing tours realize fewer public purposes and degrade wilderness character.

This activity primarily accesses freshwater lakes or marine waters. There are few suitable lakes within the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas and they afford outstanding opportunities for solitude that have been lost along the accessible marine corridors penetrating the wilderness. There is no need to introduce floatplane landing tours along the well-trafficked marine waters to access sites already used by boat-based tourism. In addition, this activity is not considered a traditional wilderness pursuit, as it predominantly involves viewing natural features from the air and landing for only short periods of time within the wilderness (question Rp2). This activity generally does not allow opportunities for visitors to forge deep connections with nature uninhibited by modern civilization. The act of viewing the wilderness from an aircraft and spending relatively short periods of time on the ground, within the landscape and soundscape represents an activity dominated by modern mechanization and convenience (flying) and does not fulfill the scenic purposes of wilderness (question Sp2). This activity, with brief visits in wilderness but primarily focused on flying, does not offer an in-depth experience that supports participation in citizen stewardship projects; nor does it provide sufficient context for larger world conservation concerns (question Cp3). Therefore, this commercial service activity is not necessary to achieve the recreation public purposes of the Wilderness Act.

Floatplane landing tours are not compatible with preserving wilderness character, in particular, with regards to naturalness and to outstanding opportunities for solitude or a primitive and unconfined type of recreation, specifically Wilderness Character Screening Questions Nc1, Oc1 and Oc2. The confined fjords with granite walls and marine floors project aircraft noise for many miles. This activity would occur on lakes that afford degrees of solitude rare elsewhere in the wilderness and would degrade opportunities for those visitors to experience solitude and primitive recreation. Therefore this commercial service activity is not necessary due to its incompatibility with preserving outstanding opportunities for solitude or a primitive and unconfined type of recreation.

Camping

Camping commercial service activities are necessary in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.

Outfitted and guided camping services are currently a small component of commercial use in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas, but significant in the rich experiences they afford visitors. The majority of camping services occur in connection with multiple day marine based kayak trips along the shoreline. Camping involve skills that embrace traditional techniques and require elements of risk and challenge, especially for those new to the activity. It encourages self-reliance and helps strengthen independent decision-making. Scenic vistas and wildlife observations are normally the highlights of such trips, and clients are often given opportunities for quiet time to contemplate and appreciate nature. The multiple day

experiences that result often forge deep connections to nature that inspire photographs and art. Guides can help clients understand the regulations and ethics surrounding the viewing of wildlife and the requirements of camping.

Freshwater Fishing

Freshwater fishing commercial service activities are necessary in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.

Fishing guides in general can help realize the purposes of wilderness in most locations of Tracy Arm - Ford's Terror and Chuck River Wilderness Areas while preserving wilderness character. Historically guided fresh water fishing activities have largely been day-use accessed from the confluence with marine waters. Fishing is a traditional wilderness pursuit where guides can teach skills and connect clients to nature in meaningful and memorable experiences that involve self-reliance. Fishing groups are generally smaller and they seek solitude in order to avoid competition with others. Fishing groups often spend more time in wilderness which enhances their appreciation of scenery and affords more opportunity to study nature. Guides often practice catch-and-release fishing, uphold state regulations pertaining to the harvest of fish and report results to State officials who manage the harvest and consider effects upon populations. Fishing guides do not typically realize historical purposes of wilderness in that clients don't study historic sites under agreement with archaeologists.

Hunting

Commercial hunting activities are necessary in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas.

Hunting guides can realize most of the public purposes while preserving wilderness character. Non-resident big game hunters are required under state regulation to be accompanied by a guide or resident family member. The Tracy Arm – Ford's Terror and Chuck River Wildernesses feature accessible terrain that affords Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation to hunters. Hunting is a traditional pursuit that requires ample solitude to watch, track and pursue ranging game. Skills developed during hunts often require challenging decision making and self-reliance. Binoculars and viewing devices are normally used and clients have abundant opportunities to enjoy scenery and to study nature. Guides uphold state regulations pertaining to the pursuit and harvest of game and they must report results to State officials who manage the harvest and consider effects upon populations. They have the opportunity to involve clients in studies and connect clients to nature through education described in their operating plans. Hunting guides do not help realize historical purposes of wilderness in that clients don't study historic sites under agreement with archaeologists.

APPENDIX 1: Screening questions and conclusions of screening questions sorted by activity

Public Purpose Screening Questions:

Rp1 - Do the commercial service activities require an extraordinary degree of specialized skill, equipment and involve challenges that inhibit access and enjoyment by the majority of the general public?

Rp2 - Do the commercial service activities align with traditional wilderness pursuits?

Sp1 - Do the commercial service activities enhance clients' appreciation of the aesthetics of the wilderness?

Sp2 - Do the commercial service activities invoke opportunities for inspiration and/or allow for deep connections with nature uninhibited by modern civilization?

Scp1 - Do the commercial service activities provide opportunities to assist with scientific studies or involve the scientific process of studying nature?

Ep1 - Do the commercial service activities offer opportunities for education and interpretation about certain values of the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas such as cultural, ecological or geological in a way that fosters connections to nature?

Cp1 - Do the commercial service activities adhere to laws, regulations and outdoor ethics that protect and support wilderness character?

Cp2 - Do the commercial service activities provide opportunities for clients to learn why certain laws, regulations and ethics are in place for conservation concerns?

Cp3 - Do the commercial service activities offer opportunities to engage in citizen stewardship projects and/or provide context to larger world conservation concerns?

Hp1 - Do the commercial service activities offer opportunities to foster a connection between local human habitation and use of the wilderness and its other ecological values?

Wilderness Character Screening Questions:

Nc1 - Are commercial service activities compatible with preserving the natural character of Tracy Arm - Ford's Terror and Chuck River Wilderness Areas?

Oc1 - Are commercial services activities compatible with preserving opportunities for solitude, challenge, decision-making and self-reliance?

Oc2 - Are commercial service activities compatible with preserving primitive or unconfined type of recreation experiences?

Uc1 - Are commercial services activities compatible with the preserving the undeveloped character by not relying on developments or motorized equipment and mechanical transport not specifically allowed under ANILCA?

Utc1 - Are commercial service activities compatible with preserving unhindered natural processes that are free from human control or manipulation?

Ovc1 - Are commercial service activities compatible with the preservation of cultural values, sites and subsistence activities?

Ovc2 - Are commercial service activities compatible with the preservation of prominent ecological, geological and scenic features identified in the Tracy Arm - Ford's Terror and Chuck River Wilderness Areas?

Findings for the Tracy Arm – Ford’s Terror and Chuck River Wilderness Areas

	Remote Setting Nature Tours	Floatplane Landing Tours	Camping	Freshwater Fishing	Hunting
Public Purposes					
Recreational					
Rp1-Challenge	Yes	No	Yes	Yes	Yes
Rp2-Traditional	Yes	No	Yes	Yes	Yes
Scenic					
Sp1-Appreciation	Yes	Yes	Yes	Yes	Yes
Sp2-Inspirational	Yes	No	Yes	Yes	Yes
Scientific					
Scp1-Study	Yes	Yes	Yes	Yes	Yes
Educational					
Ep1-Connections	Yes	Yes	Yes	Yes	Yes
Conservation					
Cp1-Rules/ethics	Yes	Yes	Yes	Yes	Yes
Cp2-Values	Yes	Yes	Yes	Yes	Yes
Cp3-Stewardship	Yes	No	Yes	Yes	Yes
Historical					
Hp1-Connections	Yes	Yes	Yes	Yes	Yes
Wilderness Character					
Natural					
Nc1-Natural	Yes	No	Yes	Yes	Yes
Outstanding					
Oc1-Solitude	Yes	No	Yes	Yes	Yes
Oc2-Primitive	Yes	No	Yes	Yes	Yes
Undeveloped					
Uc1-Undeveloped	Yes	Yes	Yes	Yes	Yes
Untrammeled					
Utc1-Untrammeled	Yes	Yes	Yes	Yes	Yes
Other					
Ovc1-Cultural	Yes	Yes	Yes	Yes	Yes
Ovc2-OtherFeatures	Yes	Yes	Yes	Yes	Yes
Determination of Need	Yes	No	Yes	Yes	Yes

