basis for reporting the seven rural communities subsistence use patterns:

Seitz, J. and J. A. Fall. 1994. The Use of Fish and Wildlife In the Upper Kenai Peninsula Communities of Hope. Cooper Landing, and Whittier. Alaska Department of Fish and Game. Technical Paper 219.

Fall, J. A., and C. J. Uttermohle, editors. 1995. An Investigation of the Sociocultural Consequences of Outer Continental Shelf Development in Alaska. OCS Study MMS 995-012. U. S. Department of Interior. Minerals Management Service, Alaska OCS Region.

Though several communities had several years of survey data, the years used were considered the most representative by the ADF&G Subsistence Division. This information was used to establish the baseline for use patterns for important fish and wildlife species that could be potentially impacted by management activities permitted under the Revised Forest Plan.

Research Natural Areas (RNA)

Comment 01: Cedar Bay (a large Alaska yellow cedar population at the northern limit of the species range) and Cutoff Creek (a needle leaf forest on depositional surface) should be in included as RNAs in the final Plan.

Response: The alternatives analyzed from 0 to 7 new RNAs. Cedar Bay was proposed as an RNA in Alternatives B, C, D, E, and F. The Cedar Bay area is not a proposed RNA under the Preferred Alternative. An area of private land occurs within the watershed boundary of the Cedar Bay eligible RNA. Potential development of this contiguous private land would be inconsistent with RNA objectives. Under the Preferred Alternative, the Cedar Bay area is Recommended Wilderness.

Cutoff Creek was proposed as an RNA under Alternative D and F. Under the Preferred Alternative, the Cutoff Creek area has a Backcountry prescription (211). These prescriptions would maintain the natural ecological characteristics and function with the area and would not preclude research activities. For these reasons, the area is not recommended as an RNA under the Preferred Alternative.

Comment 02: We are opposed to any RNAs on the Copper River Delta near Pete Dahl that would restrict traditional hunting.

Response: The Pete Dahl Slough area is not a proposed RNA under the Preferred Alternative. Nonmotorized subsistence use is allowed within RNAs (FEIS, Chapter 3, Research Natural Areas, Environmental Consequences, Direct and Indirect Effects, Effects of proposed RNAs on subsistence management).

Roadless Areas

Comment 01: All roadless areas, especially the Copper River Delta, Kenai Peninsula, Prince William Sound, and Snow River, should be protected. How will the Forest incorporate the new rule for roadless areas into the final Plan?

> **Response**: The Forest analyzed an array of alternatives that would retain from 40 to 100 percent of the inventoried roadless areas on the Forest. The Preferred Alternative would retain 97 percent. The Preferred Alternative has 149,960 acres in management area prescriptions that permit Forest Service road construction.
>
> In May 2001, the Forest Service implemented a Roadless Area Conservation Rule that prohibited road construction, reconstruction and timber harvest, except for stewardship purposes, in inventoried roadless areas. This rule making followed federal requirements, including preparing an EIS, and applied to the 5,434,710 acres of inventoried roadless lands on the Chugach National Forest. Currently, the Forest Service is revaluating its Roadless Rule and is enjoined from implementing all aspects of the Roadless Rule by the U.S. District Count, District of Idaho (U. S. District Court of Idaho, 2001). The Chugach National Forest Revised Forest Plan will follow all final Roadless Rule requirements (FEIS, Chapter 3, Roadless Area).

Comment 02: The cumulative effects section was inadequate because it did not address the proportion of roadless areas on the Forest in different ecological types. The analysis should contain a quantitative analysis of the change over time in the percentage of roaded and roadless acres in the different vegetative types for the Kenai Peninsula.

> **Response:** For each roadless area the Providence, Ecosection and Ecosubsection (acres) are listed. An assessment of potential changes over time has been added (FEIS, Appendix C). Land cover types, by geographic area (including the Kenai Peninsula) are shown in the FEIS, Table 3-12. Changes in vegetative cover by alternative, for each prescription category (note: Category 1 and Category 2 are generally roadless) are thoroughly discussed in Chapter 3, Biodiversity, Environmental Consequences, Vegetative Cover. The effects are displayed in the FEIS, Figure 3-8b. Management area prescriptions for each roadless area by alternative are displayed in the FEIS, Appendix C. Changes in the acres of roadless lands, over time, that could be affected by roads are shown in the FEIS, Table 3-65.

Comment 03: Despite its knowledge that Chugach Alaska Corporation intended to use the 37-mile road on Montague Island, the Forest Service included it in the roadless acres available for Wilderness designation. This must be corrected in the final documents.

Response: Chugach Alaska Corporation (CAC) had a permit to construct and use a road on Montague Island to access and harvest timber on their lands. The harvest has been completed and the permit has expired. As part of the permit requirements, the road on the Forest was obliterated. Therefore, this area was included in the roadless inventory. It does not diminish CAC's rights for future access to their lands.

Access Management

Comment 01: No new roads should be constructed. Support more road construction because the Forest is so inaccessible.

Response: Roads are necessary for a variety of Forest uses (general access, recreation, timber harvest, mining, etc.) The amount of road construction proposed in the alternatives varies from 1.3 and 11.4 miles of new road per year. The Preferred Alternative would construct about 3.3 miles of new road per year.

Comment 02: We are opposed to constructing the Carbon Mountain Road on the Copper River Delta and logging and mining on private lands. The Forest Service should buy these rights.

Response: This comment is outside the scope of the Revised Forest Plan analysis. As required by the 1982 CNI Settlement Agreement, Chugach Alaska Corporation has been granted an easement to construct a road from the Copper River Highway to their private lands near Carbon Mountain.

Comment 03: To comply with the Alaska Native Claims Settlement Act, the Preferred Alternative should state that access to Native corporation lands will be provided.

Response: We have clarified that in the Revised Forest Plan (Chapters 1 and 3, Basic Principle 4).

Comment 04: Even though the Chugach National Forest is 98 percent roadless, no road corridors were studied, identified, considered or proposed. The Forest Service failed to explicitly recognize and consider Chugach Alaska Corporation's reasonably foreseeable access routes in the proposed Forest Plan.

Response: Roads were a part of each alternative. See Response to Comment 03 in this section. Foreseeable Chugach Alaska Corporation routes were included in the analysis (Chapter 3, Access).

Comment 05: The DEIS failed to distinguish between 17(b) easements, CNI easements and Forest Service trails and their allowed uses.

Response: A 17(b) easement is an Alaska Native Claims Settlement Act (ANCSA) easement across Native lands to provide access to National Forest System lands. A 17(b) easement can only be altered for public health and safety reasons or as required

by other laws. CNI easements are easements for public access trails across private lands. The Revised Forest Plan reflects the fact that only Forest Service trails are managed and regulated by the Chugach National Forest.

Comment 06: We do not want to see any changes in the Forest Plan that would prevent traditional activities. If we need snowmachines, ATVs, or boats, we should be allowed to use them.

Response: Under the Revised Forest Plan, one small area northwest of Cordova (Power Creek) would be closed to subsistence access to provide for nonmotorized use (FEIS, Chapter 3, Subsistence). A new basic principle has been added to the Revised Forest Plan dealing with this concern (Revised Forest Plan, Chapter 3, Forestwide Direction, Basic Principle #3). Also see our Response to Planning Process Comment 10.

Comment 07: The Forest Service needs to define traditional activities in a way that is consistent with ANILCA and the intent of Congress. It does not include snowmobiling, especially in Wilderness or Wilderness Study Areas. The Forest Service should revise the Alaska Region Supplement to FSM 2826.1 to reflect the law and eliminate recreational snowmachines from Wilderness and Recommended Wilderness.

Response: Section 1110(a) of ANILCA permits "...the use of snowmachines, (during periods of adequate snow cover, or frozen river conditions in the case of wild and scenic rivers), motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities…" on Wilderness, Wilderness Study Areas, and other Conservation Units unless "…the Secretary finds such uses would be detrimental to the resource values of the unit or area.'' Also see our Response to Wilderness Comment 04. Revising the Regional Supplement to FSM 2326.1 is outside the scope of forest planning.

Definitions of traditional activities both from ANILCA and the Alaska Regional Supplement have been added to the Glossary.

Comment 08: **T**he trails and routes management practices for the Preferred Alternative should be revised to meet local concerns. Leave all existing trails open for existing recreational uses. They supported trail improvement and maintenance, and construction of new cross-country ski trails.

Response: Several changes in the access management for the Preferred Alternative were made in response to local concerns. (FEIS, Appendix F). Also see our response to Recreation and Tourism comments 01 and 02.

Comment 9: Some respondents were opposed to the ADOT&PF's proposed Copper River Landing Bypass. The Preferred Alternative should remove any reference to the Juneau Creek option for the Cooper Landing Bypass.

Response: The Alaska Department of Transportation and Public Facilities (ADOT&PF) is supplementing their EIS on the Sterling Highway MP 45-60 Project (Cooper Landing Bypass). Three preliminary alternatives have been developed: Juneau Creek, Cooper Creek, and Kenai River. The Juneau Creek Alternative would construct the bypass mainly on Chugach National Forest lands. As this is a reasonably foreseeable project, it was discussed in the DEIS.

Comment 10: Under the Preferred Alternative, why is the Lost Lake Trail closed to mountain bikes? If any part of the trail is closed it should be the alpine area around Lost Lake. The lower part is very durable. If the Lost Lake trail is to be closed to mountain bikes, it makes sense to close the trails around the Lake also since this is where the heavy impact is occurring.

Response: Under the Access Management Plan, mountain bikes will be allowed on Lost Lake Trail. To protect trails in the spring, a new closure for all trails from April 1 to June 30 for mountain bikes will be added. Also see our Response to Access Comment 08.

Wild and Scenic Rivers

Comment 01: The Preferred Alternative should have more/less Wild and Scenic River recommendations.

Response: Alternatives for Wild and Scenic River recommendations varied from 0 to 350.3 miles. The Wild and Scenic River recommendations in the DEIS Preferred Alternative have been revised. The Preferred Alternative, in the FEIS, recommends 7 rivers for designation. The 7 recommended rivers would, in the long run, provide a balance of protection and development opportunities, while contributing significantly to the National Wild and Scenic Rivers System. Sixmile Creek, East Fork Sixmile Creek, Snow River, Twentymile River, Portage Creek, Russian River and the lower section of the Nellie Juan River are recommended for designation under the Preferred Alternative.

Both Columbia and Portage glaciers were dropped from the recommended rivers in the Preferred Alternative.

All named rivers and glaciers (760+) and several unnamed rivers on the Chugach National Forest were examined and evaluated to identify outstandingly remarkable river-related values that would make them eligible for inclusion in the National Wild and Scenic Rivers System.

As part of the rivers evaluation process, rivers were divided into reaches of essentially similar characteristics. Segmentation ensures that important differences in river character are not overlooked and allows portions of rivers to be found eligible for

designation while other sections may be found to be not eligible for some reason.

The final step in the river assessment process is the determination of suitability. This phase evaluates whether designation as a National Wild and Scenic River would be the best way to manage eligible rivers. This step provides the basis for the decision to recommend designation or non-designation of an eligible river. Some of the factors that were considered in the determination of suitability include: current status of land ownership and use, and the amount of private land involved; reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the river were designated, as well as the values that might be lost without designation; the cost of acquiring land; and other issues and concerns (see FEIS, Appendix D).

Comment 02: The eligible Wild and Scenic Rivers were under-classified. Twentymile River should be classified as a Wild River. Why was the Martin River only recommended as a Scenic River, and not a Wild River? The Bering River Scenic classification was erroneously based on outdated development plans from Chugach Alaska Corporation. It should be classified as Wild.

Response: Once determined eligible, river segments are classified as Wild, Scenic, or Recreational based on the degree of access and amount of development along the river area. If designated by Congress, the enabling legislation designates the final river classification.

The planning process includes this Environmental Impact Statement (EIS), which examines a range of alternatives for managing and protecting the outstandingly remarkable values of eligible rivers. In response to significant public issues and concerns the alternatives provide a variety of options for river recommendations, boundaries and classifications. These options are consistent with the theme and desired future conditions associated with each alternative.

Twentymile River was classified as a Scenic River in the Preferred Alternative to allow for some degree of future growth in motorized use of the river area, especially for winter recreation.

The Martin River was not recommended for any designation in the Preferred Alternative to allow for fish and wildlife habitat enhancement and other multiple use activities that are consistent with the conservation of fish and wildlife habitat values.

The Bering River was considered but not found to be suitable in the Preferred Alternative based upon the theme of that alternative and the consideration of other land uses that could be curtailed or foreclosed if the river was designated. It was also determined that

the outstandingly remarkable values of the river would be adequately protected by the application of the new 501(b) – 1 Management Area prescription (see FEIS, Appendix D).

Comment 03: Additional rivers should be studied for their eligibility, including Seattle Creek and the Resurrection River.

Response: We have completed a comprehensive study of eligible Wild and Scenic Rivers. All named rivers and glaciers (760+), including Seattle Creek and Resurrection River, and several unnamed rivers on the Forest were examined and evaluated to identify outstandingly remarkable river-related values that would make them eligible for inclusion in the National Wild and Scenic Rivers System. Although Seattle Creek and Resurrection River were found to have special values, they were not determined to be so unique as to make them outstandingly remarkable (see FEIS, Appendix D).

Comment 04: The Preferred Alternative should implement the ½ mile boundary, as allowed by ANILCA. The Forest Service should follow the precedent created by ANILCA and establish management boundaries that encompass an average of 640 acres per mile on both sides of the river.

Response: ANILCA established several Wild and Scenic Rivers in Alaska. Section 606(a) of ANILCA specifies that: "(1) the boundary of each such river shall include an average of not more than six hundred and forty acres per mile on both sides of the river." We did not find any language in ANILCA that directs a minimum ½ mile corridor for eligibility and suitability determinations of Wild, Scenic and Recreational Rivers in Southcentral Alaska that occur after the passage of ANILCA. Therefore, we generally followed the Wild and Scenic Rivers Act (Section 4(d), 1986) and Forest Service Handbook (FSH 1909.12, Chapter 8.13) direction to consider a minimum of ¼ mile from each bank of the river. In some cases however, we recommended larger boundaries where we felt it necessary to protect the outstandingly remarkable value of the river. Twentymile River is an example where larger boundaries were recommended.

Wilderness

Comment 01: The Preferred Alternative should have more/less Wilderness recommendations.

Response: The Chugach National Forest is managed as part of the National Forest System, and thus is managed for a variety of uses that range from wilderness to intensive use of resources. The alternatives for Wilderness recommendations varied from 0 to 80 percent Wilderness. After significant public involvement and detailed analysis, the Preferred Alternative recommends that 34

percent of the Chugach National Forest be designated as Wilderness by Congress. The Preferred Alternative allocates another 9 percent of the Forest to prescriptions in Category 1, where ecological processes are allowed to operate relatively freely from the direct influence of humans, and users must be self-reliant with low levels of contact with other people. The Preferred Alternative allocates another 53 percent of the Forest to Category 2 prescriptions, which include Backcountry and Fish and Wildlife Conservation areas. Based on our analysis, we have concluded that these designations best meet the desires of the public while meeting the objectives of providing a spectrum of multiple uses on the Chugach National Forest.

In the FEIS, some additional Wilderness (about 60,000 acres) is recommended in the Nellie Juan-College Fiord Wilderness Study Area. Also, the boundaries were reduced slightly (about 7,000 acres) on one area (Bearing Lake Roadless Area south of Martin River Glacier) to eliminate a perceived conflict with the adjacent private landowner. A new management prescription was created for the eastern portion of the Cooper River Delta that provides more wilderness-like management (135 501(b) - 1). However, the area is not recommended for formal Wilderness classification. The reasons for these decisions can be found in the Record of Decision.

Comment 02: Wilderness and Wild and Scenic River recommendations severely limit access to private in-holdings and adjacent private lands. The DEIS provided no analysis of the impacts Wilderness designation would have on access to private inholdings, adjacent private lands, or potential developable lands within the Forest.

Response: Reasonable access would be granted to state and private lands, and to valid mining claims (FEIS, Chapter 3, Wilderness, Environmental Effects, Direct and Indirect Effects, Effects on Lands). The FEIS, Appendix C displays the number of acres of private land within each roadless area. New information has been added to the FEIS that shows the acres of isolated private land within Recommended Wilderness, by alternative (FEIS, Wilderness, Environmental Consequences). Under the Preferred Alternative, there are no isolated private lands within Recommended Wilderness. Adjacent private lands would not be affected by Wilderness designation. The Recommended Wilderness boundary along private land near Carbon Mountain has been moved back.

Comment 03: The DEIS did not adequately address the irretrievable loss of potential Wilderness to the Proposed Revised Forest Plan's inaction to preserve it.

Response: The potential loss of wilderness is discussed throughout Chapter 3. Additional information has been added to this Chapter in the Wilderness Section. Under the Preferred Alternative, the opportunity for Congress to considered Wilderness designation is retained on most all (98.9 percent) of the inventoried roadless lands on the Chugach National Forest.

Comment 04: The Forest Service interpretation of Section 1110(a) of ANILCA for allowing motorized use in Wilderness is not correct. Motorized equipment for recreation maintenance, construction and reconstruction projects should not be used in the Wilderness.

Response: Section 1110(a) of ANILCA permits the use of snowmachines on Wilderness, Wilderness Study Area, and other conservation system units. Also see our Response to Access Comment 07. Section 4(c) of the Wilderness Act provides for use of motorized equipment in emergencies involving health and safety.

Under regulations (36 CFR 293.6 (c)), the Chief may also authorize officers, employees, agencies, etc. to carry out the purposes of the Wilderness Act and prescribe conditions under which motorized equipment, mechanical transport, aircraft may be used to meet the minimum requirements for authorized activities to protect and administer the Wilderness and its resources (administrative use). This authority has been delegated to the Regional Forester. Policy direction is found in Forest Service Manual 2326.

Forest Products

Comment 01: The Preferred Alternative should have more/less timber harvest.

Response: These comments mirror the range of public input received during the scoping and alternative development process. The alternatives in the DEIS respond to this range of public input; some alternatives (No Action, A and B) provided variable levels of commercial use and personal use forest products; while other alternatives only allow for personal use forest products (Preferred, C, D, E, and F). While these alternatives do not have a scheduled (ASQ) component, they do provide for some timber harvest to meet local needs.

Comment 02: The Preferred Alternative did not have an ASQ. This is a violation of the Multiple Use-Sustained Yield Act and that it would lead to no long-term policy of commercial timber harvest and continued disregard for NFMA's mandate. No FORPLAN or any other systematic analysis was used to develop a factual information base. The economic analysis for timber is questionable.

Response: All alternatives, including the Preferred, started with a tentatively suitable timberland base of 282,610 acres. An economic analysis of the tentatively suitable timberland base indicates that an ASQ on the Chugach National Forest is not economically feasible

under low or middle market conditions. The analysis estimate does indicate that an ASQ could be economically feasible under high-market conditions. The No Action Alternative and Alternatives A and B have an ASQ. Those alternatives displaying an ASQ in Table B-1 (FEIS, Appendix B) are based on high-market conditions only; otherwise the ASQ for all alternatives would be zero.

In regards to the Preferred Alternative's zero ASQ under high-market conditions, the alternative's theme of conserving fish and wildlife habitat while providing recreation opportunities (FEIS page 2-19) required the application of Forestwide standards and guidelines and management area prescriptions that resulted in the re-classification of all 282,610 tentatively suitable acres as not appropriate or unsuitable for timber production (items 10 a. thru 10 n., FEIS, Appendix B). This resulted in a zero ASQ even under high-market conditions.

The Multiple Use-Sustained Yield Act (MUSYA) and National Forest Management Act (NFMA) do not require a national forest to have an ASQ (allowable sale quantity). Section 2 of the MUSYA authorizes and directs the Secretary of Agriculture to develop and administer the renewable surface resources of the national forests for multiple use and sustained yield of several products and services after giving due consideration to the relative values of the various resources in particular areas. In the case of the Preferred Alternative, there were no suitable acres of timberland left after giving due consideration to the relative values of the various resources on the Chugach National Forest. NFMA (36 CFR 219.14(d)) requires reviewing the classification of unsuitable timberlands at least every 10-15 years and this is a monitoring item. In addition, land suitability may be adjusted at any time due to changed conditions and could be accomplished by amending the Revised Forest Plan.

Appendix B in the FEIS describes how the timberland suitability analysis, benchmark analysis, and a Stage II economic analysis using Excel spreadsheets were conducted.

Comment 03: The Forest Service used outdated timber data. Kenai Peninsula timber data is 13 years old, and the Forestwide timber data is 22 years old. About 1,581,00 million acres of public domain land transferred by ANILCA were not inventoried; however, the Forest Service stated that these additions had very little commercial timber value.

Response: 36 CFR 219.12(d) directs the Forest Supervisor to obtain and keep current inventory data appropriate for planning and managing the resources and to ensure that the Interdisciplinary Team has access to the best available data. Although the Forestry Sciences Lab initiated a new timber inventory of the entire Chugach

National Forest during the summer of 1998, the results will not be available for use before 2002. Therefore, the inventories (1978 forest inventory of the Chugach National Forest and the 1987 forest inventory of the Kenai Peninsula) that were used for this Forest Plan revision are the best available data for the timber resources of the Forest. We have concluded that the data is sufficient for Forest Plan revision (see FEIS, Appendix B).

Because lands in the Chugach National Forest ANILCA additions were not inventoried in the above forest inventories, vegetation types on these lands were classified and inventoried using satellite images. Although the classification was broad, these lands were included in the timberland suitability process. While some forestland was identified in the ANILCA additions, no tentatively suitable timberland acres were identified.

Comment 04: Clarify the definition of "chargeable forest products" and "non-chargeable forest products". Define "stewardship logging" and "salvage logging".

Response: The terminology "chargeable" and "non-chargeable" simply refers to whether or not the volume measurement of forest products derived from commercial tree species (spruce and hemlock) originate from suitable timberlands. Suitable timberlands are designated for commercial timber production and have a scheduled ASQ (allowable sale quantity) calculated for these commercial tree species. The volume measurement of harvested forest products from these commercial tree species are chargeable to that calculated ASQ which is the maximum amount that can be harvested during the planning period. Harvested forest products from non-commercial tree species (cottonwood, birch, aspen, willow) or from lands unsuitable for commercial timber production are not chargeable to an ASQ.

Stewardship or salvage logging are specific reasons for conducting timber harvest operations and may or may not generate forest product volumes that are chargeable to an ASQ (see FEIS, Glossary for definitions).

Comment 05: The impacts on timber management and the standards and guidelines were not described in the DEIS. This is a violation of the Organic Act, Multiple Use Sustained Yield Act and NEPA. The standards and guidelines do not provide for forest management standards that address utilization, timber yield, or second growth management. This is a violation of the Organic Act, Multiple Use-Sustained Yield Act and NFMA.

Response: Laws, regulations, policies, Forest Service Manual and Handbook direction, and other direction in Appendix D of the Revised Forest Plan that apply to National Forest System lands are not reiterated in the Forestwide or Management Area standards and guidelines.

Forestwide and Management Area prescription standards and guidelines affect timber management by removing land from the suitable timberland base reducing the potential ASQ and long-term timber growth and yield. These effects were discussed in EIS, Chapter 3, Forest Products, Environmental Consequences.

Comment 06: Suitable timberlands were not used in the evaluation of alternatives. Finding no suitable timberlands on ANILCA 501(b) lands is not consistent with the Act.

Response: A tentatively suitable timberland base of 282,610 acres was used in the development of each alternative. For an alternative to have suitable timberlands, it must have had land allocated to one of the four management area prescriptions that allowed timberlands to be scheduled for commercial timber production (Prescriptions 312, 314, 321, or 411). As displayed in Table B-1 in Appendix B of the FEIS, three of eight alternatives have suitable timberlands designated, while five of the eight alternatives contain no suitable timberlands.

As displayed in FEIS, Table B-2 of Appendix B, the ANILCA 501(b) – 3 Management Area prescription allows the designation of suitable timberlands, while the other ANILCA 501(b) – 1 and - 2 prescriptions do not allow the designation of suitable timberlands.

Comment 07: There was no attempt to determine the demand for scheduled timber harvest. The demand evaluation process used on the Chugach National Forest did not consider what level of timber could be sold from the Chugach if a reliable supply of economic timber was available. A complete demand analysis would have found that there are 37 mills within the geographic area having reasonable access to the Chugach National Forest. These mills have an installed capacity of more than 37 MMBF annually.

Response: Two sources of information were used to estimate timber demand for the Chugach National Forest. The first was an analysis of Chugach National Forest timber volume offered, sold, and harvested over the last twenty years (1980-1999) (FEIS, Table 3-83). An average of 1.8 MMBF has been harvested annually over the last twenty years. The average annual timber sale offering was 8.1 MMBF while the average amount sold was 2.5 MMBF. The amount sold is less than one-third (30.6 percent) of the average annual offer. Of the average annual amount sold, only 1.8 MMBF was actually harvested. This represents 21.8 percent of the average annual offer of 8.1 MMBF. An average of 1.8 MMBF per year appears to be a reasonable estimate of experienced demand over the last twenty years.

The second source for demand data for the Chugach National Forest was derived from a published 1997 Brooks and Hayes study for the Tongass National Forest. The derived demand for the

Chugach National Forest from this study ranges from 1.1 to 1.8 MMBF per year.

We reviewed the list of 37 mills submitted with this comment and concluded that only four of the identified mills have reasonable economic access to the Chugach National Forest. One of these is in Anchorage, one in Seward, and two in Cooper Landing. The installed annual capacity of these four mills is estimated at 2.0 MMBF. This conclusion is consistent with operators who have purchased and successfully completed timber sales on the Chugach National Forest during the last twenty years.

Minerals

Comment 01: The DEIS failed to adequately address the mineral resource. The minerals data is outdated.

Response: The Chugach National Forest is a vast, mountainous, rugged area of approximately 5.4 million acres. Minerals information is difficult and very expensive to acquire. Over one million acres is covered with ice. Many parts of the Forest are very remote and difficult to assess.

Geologic, geophysical, and geochemical investigations, along with surveys of known mines, prospects, and mineral occurrences, have been conducted by the U.S. Geological Survey and the U.S. Bureau of Mines (now BLM) to evaluate the mineral resource potential of the Chugach National Forest. Identified and potential resources include gold, copper, zinc, silver, lead, coal, oil, and possibly manganese, molybdenum, nickel, chromium, barium, cobalt, tungsten, and antimony. Significant amounts of gold and copper were produced on the Forest in the past. Oil has been produced from the Katalla/Controller Bay area of the Forest. The following is a summary of mineral assessments used in the FEIS, Chapter 3, Minerals:

Table K-1: Summary of mineral assessments within the Chugach National Forest area.

U.S.G.S. Regional Assessments			
Area	**Scale**	**Reference**	**Comments**
Southcentral Alaska	1:1,000,000	MacKevett and Holloway (1977)	Shows areas favorable for mineral deposit types. Lists known deposits
U.S.G.S. Alaska Mineral Resource Assessment Program.			
Area	**Scale**	**Reference**	**Comments**
Seward and northern Blying Sound quadrangles	1:250,000	Tysdal and Case (1982)	Gives probabilistic estimate for undiscovered Cyprus-type massive sulfide deposits.
Valdez quadrangle	1:250,000	Winkler and others (1981)	Shows location of mines prospects, and mineral occurrences.
Cordova and northern Middleton Island quadrangles.	1:250,000	Goldfarb and others (1992)	Areas ranked based on their potential for containing undiscovered resources.
Anchorage quadrangle	1:250,000	Madden-McGuire and Winkler (1994)	Areas ranked based on their potential for containing undiscovered resources.
U.S.G.S./BLM (Bureau of Mines) Assessments Covering the Chugach National Forest (CNF)			
Area	**Scale**	**Reference**	**Comments**
CNF	1:250,000	Nelson and others (1984)	Ranks areas of mineral potential on their likelihood for future mineral activity.
CNF	1:250,000	Jansons and others (1984)	Map and accompanying table depict known mines, prospects, and mineral occurrences.
CNF	1:250,000	Bliss (1989)	Probabilistic assessment of undiscovered mineral deposits.
Small area north of Glacier Island northern Prince William Sound	1:63,360	Nelson and others (1994)	Probabilistic estimate of a 1,000 km area; report addresses FS "minerals area management" concerns.
Small area north of Glacier Island northern Prince William Sound	1:63,360	ROE (1994)	Evaluation of known mines, prospects and mineral occurrences in a 1,000 km area: includes a mining feasibility determination.
Kenai road system	1:63,360	BLM (1996)	Mineral materials survey.
CNF	Forestwide	Nelson, Miller (1999)	Forestwide Assessment for Forest Plan revision.

In March 1999, the U.S. Geological Survey revised the overall mineral resource potential of the Chugach National Forest. Their report summarizes and builds on previous geologic and mineral studies. It outlines mineral resource tracts that contain both identified and undiscovered mineral resources. The criteria used were: 1) geochemical anomalies; 2) favorable geologic units; 3) presence of mines and prospects of mineral occurrences; and, 4) geophysical anomalies.

Five percent of the Forest is considered most favorable for mineral development to occur, based on the presence of known deposits. Nineteen percent of the Forest does not contain known deposits;

however, this part of the Forest has been poorly explored (due to rugged terrain and remoteness), and the geology is favorable for mineral deposits. These areas are considered highly favorable for the discovery of new deposits. Some 23 percent of the Forest is considered unevaluated and unevaluatable, primarily because of the glacial cover, rugged terrain and remoteness.

Comment 02: The Interdisciplinary Team did not include an experienced geologist or mining engineer.

Response: The Forest Geologist, with 12 years of experience, was on the extended Interdisciplinary Team (FEIS, Chapter 4 List of Preparers). The Planning Staff Officer, who was responsible for the overall revision process, has a degree in geology and over 25 years experience in minerals management. The Assistant Director, Minerals and Geology for the Alaska Region also reviewed the minerals section. We also worked closely on Forest Plan revision with the U.S. Geological Survey/BLM (Bureau of Mines).

Comment 03: The Preferred Alternative did not encourage mining and therefore is in violation of the U.S. Mineral Policy Act of 1970.

Response: The Preferred Alternative leaves 69.6 percent of Forest open to mineral entry, with 30.4 percent recommended for withdrawal. It leaves open 93 percent of the most favorable, identified resources tracts, and 70 percent of the highly favorable, undiscovered resources tracts. These percents are almost unchanged from the 1984 Forest Plan (No Action Alternative). The mining industry expressed the most interest in the highly favorable, undiscovered resources tracts. However, the most favorable, identified resources tracts are most likely to experience mineral activity. Mining can occur on all lands open to mineral entry.

Comment 04: The Preferred Alternative should have additional provisions that would provide for new road access to viable minerals.

Response: Most current mineral activity is along existing roads. Access to valid mining claims is provided for under the 1872 Mining Act. However, it is the claimant's responsibility to secure access to such claims.

Comment 05: The DEIS did not adequately address cumulative impacts of past and current mining activities, including contaminated sites.

Response: Additional information on contaminated sites and cumulative impacts from placer mining on water quality has been added to the FEIS, Chapter 3, Minerals, Cumulative Effects.

Comment 06: Even with the low potential for mineral development, the Preferred Alternative leaves nearly 75 percent of the Forest open to mineral exploration, at the expense of other resources. The Preferred Alternative should

give priority to public desires by withdrawing to mineral entry significant biological rich portions of the Forest.

> **Response:** Alternative A leaves 99.8 percent of the Forest open to mineral entry, and Alternative F, leaves 17.3 percent open. The Preferred Alternative is in a middle range between the two extremes. Environmental laws and regulations give us the necessary tools to allow mineral development while protecting the surface resources. Because the mineral potential for much of the Forest is not high, little significant mineral development is anticipated. Effects of potential mineral development on other resources have been evaluated in the FEIS.

Comment 07: We are opposed to most exploration for oil in Alaska.

> **Response:** The alternatives analyzed for the Chugach Forest Plan revision considered oil and gas opportunities ranging from 6 to 100 percent. The Katalla Area, as defined in the 1982 CNI Agreement, reserved oil and gas rights to the Chugach Alaska Corporation (CAC) (formally the Chugach Natives Inc. (CNI)). The Revised Forest Plan cannot take away these rights. CAC has the right to explore, drill for, extract, remove, and dispose of all oil and gas deposits within the Katalla Area. Under the CNI Agreement, the Katalla Exchange Area provides for an exchange preference right to the oil and gas for CAC.
>
> Under the Preferred Alternative, most of the Forest is not available for oil and gas development. Zones 1 (Katalla Area) and 2 (Katalla Exchange Area) are available for oil and gas development under the terms of the 1982 CNI Agreement.

Comment 08: Because most mining operations have been concentrated on the Kenai Peninsula, and most likely this trend will continue, the level of mining operations is diluted because they are shown on a Forestwide basis.

> **Response:** A statement has been added to the FEIS (Chapter 3, Minerals, Affected Environment, under Current Situation) pointing out this fact.

Social and Economic

Comment 01: The omission of an analysis of market and nonmarket values flies in the face of contemporary natural resource economics. By law, the Forest Service must fully account for all benefits and all costs of natural resource management.

> **Response:** A benefit-cost analysis was done for timber and appears in FEIS, Chapter 3. Benefit-cost analysis was not done for commercial fishing, mining, and recreation and tourism. The reasons why this analysis was not done are described in the Social and Economic section of the FEIS.

Comment 02: What is the rate of growth in recreation and tourism employment used and, specifically, what are the projections (DEIS, page 3-439, line 704)?

> **Response:** We have revised the projections related to recreation visitation. These are described in the Recreation and Tourism section of the FEIS, Chapter 3. Future employment related to recreation and tourism is based on these projections.

Comment 03: What are the specific projections and rate used to calculate changes in the demand for recreation and tourism is general and, specifically for dispersed and developed recreation (DEIS, page 3-439, line 823)?

> **Response:** Projections for developed and dispersed recreation, and wilderness use by alternative are now displayed and discussed in Chapter 3, Recreation and Tourism. Included in this discussion is how these projections were calculated.

Comment 04: Since the Plan has a 10-15 year planning period, will there be an opportunity to update the Plan to reevaluate and amend the supply opportunity for dispersed recreation projections?

> **Response:** The Revised Forest Plan can be amended at any time in the future based on issues or changing conditions that would require analysis. Additions to the infrastructure system will be analyzed on a site or area-specific basis according to Forestwide standards and guidelines, specific management area direction, and Forest Service Handbook and Manual direction. A 5-year evaluation will also be conducted.

Comment 05: Have you considered using the information collected through commercial tourism operators through their special use permits and actual use reports, and a 1988 tourism economic impact study to complete an analysis of economic impacts to the visitor industry in the region?

> **Response:** The reports described in the Recreation and Tourism section compiled and used data from Forest Service special use records. These reports were used to develop the Recreation and Tourism section of the EIS.

Comment 06: The Forest Service did not consider the cumulative impact of the Preferred Alternative on the economy of the State of Alaska.

> **Response:** The discussion of the economy has been revised to include material on the entire State of Alaska, not just the communities immediately influenced by the Chugach National Forest Revised Forest Plan.

Comment 07: The DEIS does not adequately evaluate the economic impact of the Proposed Revised Forest Plan on the local economy. The Proposed Plan needs to ensure that it address the needs of forest-dependent communities first, the regional community second, and the national community third.

Response: The section on economic impact has been modified. The revision more clearly describes the effects of the Chugach National Forest Revised Forest Plan on the communities most affected by the Forest. There is no specific direction in legislation or regulations specifying that national forest must meet the needs of forest-dependent communities first. National forest plans are expected to balance community needs with broader national and regional needs.

Comment 08: The Forest Service Preferred Alternative should give weight to the considerable economic impact snowmobiling has on the winter tourism industry.

Response: It is recognized that snowmobiling along with a number of other specific recreation activities have economic impacts on local communities. However, this impact does not lead to a conclusion that greater "weight" should be given to this activity. Opportunities for snowmobiling are considered along with all other Forest uses in the development and selection of an alternative.

Comment 09: The timber values in Table 3-106 appear to be biased. These estimates are based on the assumption that the high market allowable sale quantity is harvested. Are these numbers, therefore, not upper bound estimates of timber values? If so, the document should have indicated this and shown the range of values that would follow a low as well as the high market assumption.

Response: We have added discussion on the calculation of timber Present Net Value to clarify the assumptions used in the analysis.

Public Participation

Comment 01: Local input into the management of the Chugach National Forest should be given more weight than someone who may never use, or visit, the Forest.

Response: Analysis of public comment is not a vote counting procedure. Every comment has value, whether expressed by a single person or by thousands. Local, regional, and national comments all have equal value. The effect of land management programs on the local communities and the people using the Forest is an important consideration (FEIS, Chapter 3, Social and Economics).

Comment 02: The Forest Service held several meetings that were restricted to Cordova organizations and individuals.

Response: All Forest Plan revision meetings, including Interdisciplinary Team meetings and the meeting in Cordova, were open public meetings.

Proposed Revised Forest Plan Comments

Chapter 1 – Introduction

Comment 01: The Forest Plan should address adaptive management and collaboration with state agencies, local communities, and other Alaska stakeholders.

Response: The planning process did collaborate with state agencies, local communities, Alaska Natives and other Alaska stakeholders. Any further project planning, environmental assessments or environmental impact statements will collaborate and address adaptive management during the process. The Forest Plan is a programmatic document and future coordination and consultation may be required for specific actions.

Comment 02: The Forest Plan needs to be a stand-alone document. The description of the Preferred Alternative (Appendix A) needs to be a part of the Plan itself.

> **Response:** We have adjusted the Revised Forest Plan to include the material contained in this Appendix in the main part of the document. However, it should not be assumed that appendixes are not part of the Revised Forest Plan. Chapter I, in the Revised Forest Plan, clarifies the role of each Appendix and its relationship to the Revised Forest Plan.

Comment 03: The relationship between the management statements, plan maps, prescriptions, and the description of the Preferred Alternative was not adequately explained. The Forest Plan description (Appendix A) should be expanded so that it is clear how specific areas within the Forest will be managed.

> **Response**: We have changed the organization of the Revised Forest Plan to more clearly identify the role of each element. The material in the Forest Plan Preferred Alternative description has been moved into the main body of the Revised Forest Plan and the Appendix has been retained.

Comment 04: The final Plan must appropriately acknowledge the state's management authorities, including deference to the state's regulatory process when decisions may affect management of state lands, hunting, fishing, trapping, and wildlife viewing opportunities. The March 16, 1998, Master Memorandum of Understanding between the Forest Service and the Department of Fish and Game should be added to the list on page D-8 and a copy should be included for reference in the Appendix. The Plan must also recognize the Department of Natural Resources Copper River Basin Plan, Prince William Sound Area Plan, and Kenai Area Plan.

> **Response:** This information has been added to the Revised Forest Plan/FEIS. However, in keeping with our policy of not duplicating readily available information, the MOU was not included

in the appendix, but it in the planning record. The state plans were reviewed as part of the Forest Plan revision process.

Chapter 2 - Forestwide Direction

Comment 01: Do not make any changes in the Forest Plan revision that would prevent any traditional activities.

Response: We have planning principles to cover access (Chapter 3, Planning Principle #4) and traditional activities (Chapter 3, Planning Principle #5) based on the definitions in ANILCA to clarify that the Chugach Plan will not prevent traditional activities. Also see our response to DEIS, Lands, Comment 06.

Comment 02: Include Ecosystem Research in the Chugach Forest Plan by adding suggested direction in the Theme and Ecological Systems desired condition.

Response: We have added a section highlighting research needs to support the Revised Forest Plan, Chapter 5. This is associated with the Monitoring section of the Plan, rather than each prescription. Ecological System management research is included in this need.

Comment 03: Encourage the development of backcountry trailheads and trails. Discourage the development of a backcountry trail system.

Response: The levels of potential trail development vary among the FEIS alternatives to reflect a range of opportunities and environmental consequences. Under the Preferred Alternative, an average of 21.7 miles of trail will be built each year (Full implementation level). The opportunity for backcountry trail development is addressed under the direction of each prescription in the Revised Forest Plan. There is also a program of investment for trails identified in Appendix B. Site-specific analysis is required prior to the construction of any new trails.

Comment 04: The Recreation Opportunity Spectrum could prove an effective management tool, but the standards are unclear and too loose.

Response: The Recreation Opportunity Spectrum has been developed on a national level and provides guidelines in a wide variety of recreation settings. The ROS system classifies recreation settings along a continuum, which ranges from highly modified and developed to primitive environments. This system is used as a tool in planning; more restrictive standards may be applied during project planning.

Comment 05: How will the Forest Service work with NMFS, NOAA, and the EVOS Trustee Council to ensure wildlife protection**?**

Response: One of the basic principles of forest management is the coordination with the appropriate local, state, or tribal