Comment 04: Kenai Peninsula: Will the spruce bark beetle infestation sites south of Hope, along the Hope Highway leading into that community, adjoining Cooper and Kenai Lakes, and generally east of Moose Pass be treated (Forest Restoration prescription).

> **Response:** While the Forest Plan provides an emphasis and opportunity regarding a number of activities, including treatment of spruce bark beetle infestation sites, it does not authorize or clearly identify the area of application for any specific project. This depends upon site-specific analysis when project are proposed.
>
> The amount of proposed vegetation management on the Chugach National Forest under the Revised Forest Plan is 71,990 acres of treatment during the first decade. Most of this work is scheduled for the Kenai Peninsula. This includes treating 400 acres a year, all on the Kenai Peninsula, using prescribed fire. Most of this work is adjacent to high value public lands.

Comment 05: Kenai Peninsula: The Forest Plan should be more explicit concerning the development of adequate use facilities along the Seward Highway and along trails. The importance of this should be emphasized as a policy or goal in Chapter 2. Further refinement of facility location/development should be made in Chapter 3.

> **Response:** We have added a section listing projects that the Forest plans to initiate under the authorities of the Revised Forest Plan in a separate appendix. This includes a number of projects for use facilities along the Seward Highway. We have also added material related to accomplishing these projects under the Revised Forest Plan goals and objectives. Locations are only approximately identified as this depends on subsequent site-specific analysis.

Comment 06: Prince William Sound: The text states that the prescriptions within this area are intended to accommodate the expected demand for dispersed developments. A map should be provided or the day use boundary noted on the Plan map.

> **Response:** The alternatives propose a variety of management scenarios for Prince William Sound. The Revised Forest Plan identifies a general “weekend” radius for higher intensity use near Whittier. This area is shown by the 210 – Backcountry* prescription around Whittier on the Revised Forest Plan Map.

Comment 07: Prince William Sound: We are concerned with the statement, “Upland resorts and tideland commercial float facilities are encouraged only in Sheep Bay, Simpson Bay, and the entrance to Port Fidalgo. Management prescriptions will be coordinated with the State of Alaska Plan.” Please clarify that this is a recommendation regarding a revision of the State Plan. Alternatively, the statement should be dropped.

Response: Most prescriptions in Prince William Sound do not permit development of upland resorts or commercial facilities along the shoreline. The Chugach National Forest views that these types of developments are more appropriate for other ownerships. Consideration of any projects of this type will be in consultation with the State of Alaska.

Appendix B – Map of Preferred Alternative

Comment 01: The prescription at Boswell Bay seemed to overlap the pending and existing boundaries of the State Marine Park at this location.

Response: We have reviewed the map locations and made adjustments to ensure that we have not overlapped the boundaries of the State Marine Park.

Comment 02: We are uncertain if the polygon south of P 222 is an active area for snowmobiling, in which case the use of the Backcountry-winter motorized prescription might be appropriate.

Response: The area south of Polygon P 222 is not on National Forest System land.

Comment 03: The notation "Not for Conveyance" needs to be explained.

Response: This term does not appear in our map legend. It identifies lands that are not available for selection or transfer to the State of Alaska or Native corporations under the terms of ANCSA.

Appendix C – Access Management Plan

Comment 01: The Forest Plan does not reference Appendix C. The final Forest Plan needs to explain the basis for determining allowed/not allowed uses on trail and easements.

Response: The appendix has been referenced in the Revised Forest Plan. The way roads, trails, and routes will be managed is displayed in Revised Forest Plan, Appendix B, Roads Analysis and Access Management Plan. After the Record of Decision is signed, road and trail management will be implemented by a Forest order.

The proposed allowed/not allowed uses on trails and areas is intended to be consistent with activities allowed in corresponding areas. There are a few exceptions where motorized uses will be restricted in areas open to motorized use because of specific resource conflicts.

Comment 02: Table C-3 suggests two full polygons at Anderson-Double Bay would be available for ATV use. These areas include muskeg that is unsuitable for uncontrolled use. It should be made clear that only designated trail or routes are open for such use. Table C-3 also states that unvegetated sand dunes in the Boswell Special Access Area are open to ATVs. Because of the very low use levels, a seasonal closure is not necessary at this time.

Response: The Revised Forest Plan identifies Anderson-Double Bay as open to motorized use on designated routes only. We have concluded that because of the very low use levels on Boswell Special Access Area, a seasonal closure in not needed.

Comment 03: The Forest Plan revision does not show Omnibus roads, RS-2477 rights-of-way, and did not distinguish 17(b) and Chugach Native Inc. easements from Forest Service trails. RS-2477 right-of ways are state property.

Response: Omnibus roads are Quit Claim deeds issued to the State of Alaska, when Alaska became a state, from the U.S. Department of Commerce and are equivalent to easements for highway purposes. Revised Statue 2477 rights of ways are granted for the construction of highways over public lands, not reserved for public uses. This law was passed in 1866 as part of mining law (43 U.S.C. 932) and was repealed by FLPMA in 1976. A 17(b) easement is an ANCSA easement across Native lands to provide access to National Forest System lands. CNI easements are easements for trails across private lands per 1982 CNI Settlement Agreement. The Revised Forest Plan reflects the fact that only Forest Service roads and trails are managed and regulated by the Chugach National Forest. Also see our Response to Access Comment 08.

Comment 04: Restrictions on horses using the trails should be deleted. Restrictions on horses using the trails should not be changed (July 1). June 1 is too early.

Response: Under the Access Management Plan, trails will be open June 15 for horses. This will also apply to mountain bikes. Also see our Response to Access Comment 01.

Comment 05: We were glad to see that many of the prescriptions allowed a hut-to-hut system. However, we were disappointed that almost all of the prescriptions allowed for motorized recreation. A loop going from Ptarmigan

Lake over Snow River Pass, and out the Snow River drainage would be a good location for a high quality hut system.

Response: Travel management in the Revised Forest Plan is now separated from the prescriptions. The area is closed in summer to motorized uses and open for winter snowmachine use.

Comment 06: The definition of snowmobile seasons by a specific date must include a statement specially allowing the local authority to open early or close late any area where sufficient snow cover exits.

Response: This change has been made.

Comment 07: Weekly time splits for an area can work, especially if non-snowmachiners as well as snowmachiners really use an area. If you still decide to restrict snowmachiners at certain times of the year, then restrict non-

snowmachiners during the time snowmachiners are allowed and swap the time periods on a weekly or seasonal basis.

> **Response:** Several changes have been made in the Revised Forest Plan to provide snowmachine use in areas currently open. After much public input, split seasons or alternating weeks and months were not popular. The Revised Forest Plan has only one split season area (Resurrection Pass); all other areas are either open or closed for the entire season.

Comment 08: The final Plan should provide for effective motorized access for Department of Fish and Game management purposes. Approval of the "responsible line officer" could limit or delay their activities.

> **Response:** In areas where motorized use is limited or requires special approval, line officer approval is required to ensure the management intent for an area is maintained. We will work with ADF&G to expedite any requests.

Comment 09: The final Plan should clarify that the ANILCA designated Nellie Juan-College Fiord Wilderness Study Area remains subject to ANILCA Section 1110(a) that requires a specific process for modifying public access prescriptions. Actual implementation requires a proposed rule with appropriate justification.

> **Response:** Any areas recommended for Wilderness designation and the Wilderness Study Area (WSA) will be managed as Wilderness including the exceptions specifically provided for in ANILCA for access, fisheries management, etc. The Revised Forest Plan has added a discussion in the Access section that adequately describes section 1110(a) of ANILCA as it relates to proposed Wilderness and the WSA**.**

Comment 10: Table C.2 does not identify the historic trails from Tern Lake (MP 37) to Ingram Creek (MP 75), from Hope cutoff (MP 57 to Hope (MP 0)), and from MP 49 on the Seward Highway to MP 57 on the east side of Canyon Creek.

> **Response:** These trails are not currently identified on the ground. Additionally, in many cases the road over-lays these routes.

Agency, Native Government and Elected Official Letters

Letters/comments were received on the DEIS and the Proposed Revised Forest Plan from the following agencies, Native governments and elected officials.

- U.S. Department of the Interior, Office of Environmental Policy and Compliance
- Federal Energy Regulatory Commission
- U.S. Environmental Protection Agency
- State of Alaska, Office of the Governor, Division of Governmental Coordination
- State of Alaska, Department of Environmental Conservation
- State of Alaska, Department of Fish and Game
- Kenai Peninsula Borough
- City of Cordova
- City of Soldotna
- City of Valdez

29063

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
1689 C. Street, Room 119
Anchorage, Alaska 99501-5126

ER 00/726

December 13, 2000

Mr. Dave Gibbons
Forest Supervisor
Chugach National Forest
3301 C Street, Suite 300
Anchorage, Alaska 99520

Dear Mr. Gibbons:

The Department of the Interior has reviewed the September 16, 2000, Chugach National Forest Revised Land and Resource Management Plan (Forest Plan) and Draft Environmental Impact Statement (Draft EIS). Our comments on both the Forest Plan and the Draft EIS are enclosed. We look forward to continued discussions with the U.S. Forest Service (USFS) regarding mutual natural resource interests and management along adjacent land boundaries.

Our concerns with the Forest Plan center around the potential impacts on fish, wildlife, and their associated habitats from activities allowed under some prescriptions and in certain specific areas in the preferred alternative. Where prescriptions appear to allow activities we believe could harm fish and wildlife resources, especially in significant habitat areas, we are recommending more restrictive prescriptions. We wish to achieve well distributed, viable populations of fish and wildlife and prevent further adverse impacts to, and fragmentation of, important habitats.

We believe that our recommendations are for a management framework that will better: 1) provide for long-term biological sustainability of the forest ecosystem; and 2) maintain the ability of the forest to provide tangible and intangible benefits that citizens of Alaska and the nation can depend upon and enjoy now and for future generations.

Four major issues related to the Chugach National Forest and its fish and wildlife resources that are of particular concern are:

Activities allowed under the proposed the Alaska National Interest Lands Conservation Act section 501(b)-2 prescription in the preferred alternative for the Copper River Delta could have major impacts on nationally significant fish and wildlife resources. We have made recommendations for prescription changes, management practices, and monitoring in the Copper River Delta to ensure long-term protection for fish and wildlife and their habitats.

The Brown Bear Core Prescription allows activities such as roads, campgrounds, and trails. We believe these and other activities allowed under this prescription could be detrimental to brown bears and their habitats. We have offered management recommendations and prescription changes to ensure essential brown bear habitat is protected and human-bear conflicts are reduced.

Habitat fragmentation and losses, reductions in biodiversity, and adverse impacts to numerous fish and wildlife species throughout the Chugach National Forest appear likely under some prescriptions. We offer recommendations for prescription changes and management practices to prevent continued impacts to species and habitat losses.

Current and projected recreational impacts in Prince William Sound could impose many direct, indirect, and cumulative impacts on fish and wildlife and their habitats. Many of these species have not recovered or are still recovering from the *Exxon Valdez* oil spill of 1989. For key habitat areas, we believe that prescriptions in the preferred alternative will allow activities that could adversely impact these areas and the species that use them. We have made recommendations for prescription changes in sensitive habitats within Prince William Sound.

It is our goal to make every effort to assist USFS in conserving habitats and species as required by the National Forest Management Act. To discuss these comments, or if you have questions, please contact the Fish and Wildlife Service, Ecological Services Anchorage Field Office Supervisor, Ann Rappoport, at 907-271-2787.

Sincerely,

for Pamela Bergmann
Regional Environmental Officer - Alaska

Enclosure

ENCLOSURE

The Department of the Interior (DOI) comments on the Chugach National Forest (CNF) Revised Land and Resource Management Plan (Forest Plan) and Draft Environmental Impact Statement (EIS) are divided into four sections: (1) general comments on the Forest Plan; (2) specific comments on the Forest Plan; (3) general comments on the Draft EIS; and (4) specific comments on the Draft EIS. We believe that these comments and recommendations will help ensure well distributed, viable fish and wildlife populations across the forest, and avoid, or significantly reduce, threats to vulnerable species. We recommend that concepts presented below be fully incorporated into the selected alternative. We also recommend that responsive measures for incorporation of new information and adaptive management schemes be included in the Standards and Guidelines.

GENERAL COMMENTS
CHUGACH NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN

We request that concepts presented in our comments be fully incorporated into the selected alternative. We also recommend that responsive measures for incorporation of new information and adaptive management schemes be included in the Standards and Guidelines. The CNF land management planning process is a cyclical activity, designed to be reinitiated every several years for the foreseeable future. We view the process as an appropriate vehicle for incorporation of new technologies and scientific knowledge into ongoing management efforts. We suggest that the final Forest Plan include additional opportunities for timely incorporation of new issues and site-specific scientific information into the management of CNF. A degree of scientific uncertainty associated with issues of fish and wildlife conservation has been used in the Forest Plan to justify dismissal of scientific impact assessments, particularly when resource analyses and biological recommendations could result in changes in future forest practices. We believe that inconsistent treatment of uncertainty factors can preclude implementation of fresh approaches to management of the CNF, defeating the concept of adaptive management.

The range of alternatives provided appears balanced, representing prescriptions where the management intent protects natural resources (such as alternatives E and F), to prescriptions that allow a multitude of activities and resource development (such as alternatives A and B). However, we believe that the Primitive and Proposed Natural Research Area prescriptions are under-represented in all alternatives. In particular, we believe these prescriptions and the Wilderness prescription are under-represented in the preferred alternative. In addition, a number of these prescriptions allow development and access activities likely to adversely impact fish and wildlife resources. For example, the Research Natural Area prescription allows new roads, trails, motorized subsistence, and fixed-wing flight seeing landings. The Primitive prescription allows cabins, hardened dispersed campsites, and new roads and trails. To ensure that highly sensitive fish and wildlife habitat areas are afforded as much protection from development and human access as possible, we recommend that a prescription be developed that does not allow new trails, roads, motorized subsistence use, cabins, hardened dispersed campsites, or any type of motorized use.

We believe that management under the proposed forest-wide Standards and Guidelines described in the Forest Plan would not necessarily afford the level of protection needed to ensure critical landscape elements serve the many functions intended. For example, the beach (page 3-62) and estuary fringe is one of the most resource-rich habitats of the CNF. It serves many ecological functions, including breeding and foraging habitats for bald eagles and habitat for old-growth dependent and associated wildlife and fish species. Beach fringe and estuary locations are definable, and compliance monitoring would be relatively easy. However, no specific Standards and Guidelines for these areas are in the Forest Plan. We encourage the USFS to correct this oversight in the Final EIS. We believe the key to protection of these areas is that Standards and Guidelines be written precisely and definitively, stringently monitored, and rigorously enforced.

Regarding sea otters, we have provided some specific comments, but generally agree with the Standards and Guidelines set out under the various Prescription Categories. Specifically, categories 3, 4, and 5 all include provisions for interpretive displays, which we recommend include specific information relative to marine mammals in coastal areas. We also suggest that in the development of recreational facilities, or other facilities built in conjunction with other uses, the USFS ensure that all appropriate guidelines and regulations are followed. Regardless of location, any potential impacts to sea otter habitat should be minimized to the extent practicable.

Recommendations for Prescription Changes in the Final Forest Plan

Copper River Delta The lower Copper/Bering watersheds include one of the largest pristine and natural flowing wetlands remaining in the United States. The international significance of this region was confirmed with designation of the Copper River Delta as the first site in the Western Hemisphere Shorebird Reserve Network. It is an emphasis area of the North American Waterfowl Management Plan, in which USFS is an important cooperator.

Each year, at least 16 million migratory shorebirds, waterfowl and other birds use the Copper River and Bering River region for nesting and migratory staging. For example, each spring the world's population of western sandpipers and Pacific Coast dunlins rely on this area as a stopover on their way to nesting grounds in northern Alaska. The region also supports a large population of trumpeter swans and other nesting waterfowl. This area includes all of the significant nesting habitat on earth for Dusky Canada geese, a subspecies whose population is precariously close to the point where any further declines could result in its being listed under the Endangered Species Act. Similarly, this region includes a critical autumn staging area for the Tule greater white-fronted goose. The Tule goose has the smallest population of any recognized subspecies of greater white-fronted goose. All Federal agencies should be working together to protect essential habitats and promote recovery of these imperiled populations.

In addition to its tremendous values to our nation's migratory birds, this area provides critical habitat for the world famous Copper River sockeye salmon and other species, such as wolf, wolverine, lynx, brown bear, moose, and Steller's sea lion. The USFS management emphasis on protection and enhancement of these habitats has helped maintain healthy fish and wildlife populations that are essential to the subsistence lifestyle of area residents and the economies of nearby communities.

We are concerned that the proposed Alaska National Interest Lands Conservation Act (ANILCA) 501(b)-2 prescription in your preferred alternative allows for a multitude of activities that, despite precautions, could degrade and ultimately harm nationally significant resources. Activities allowed under this prescription, such as mining; new roads, trails, recreational day use facilities, cabins, campgrounds, hardened campsites, viewing areas, boat docks and ramps, and summer and winter motorized recreation (including off-road vehicle use), helicopter landings, and fixed-winged flightseeing will disturb, and over time, damage essential fish and wildlife and their habitats. We believe these impacts will have lasting effects on migratory bird populations and other fish and wildlife resources valued by local communities and the nation as a whole.

Under ANILCA 501(b), the USFS is directed to manage Copper/Rude River and Bering River for the conservation of fish and wildlife and their habitats as the primary purpose. Multiple use activities are to be permitted in a manner consistent with the conservation of fish and wildlife and their habitats. We suggest that multiple use activities allowed under the preferred ANILCA 501(b)-2 prescription are inconsistent with the conservation of fish and wildlife resources and will interfere with the primary purpose of managing this area.

The USFS has a rare opportunity to provide long-term protection of this region as a national treasure for future generations of Americans. To prevent the incremental destruction of this irreplaceable area, we believe the lower Copper River and Bering River watersheds must be afforded more protection than specified by the proposed ANILCA 501(b)-2 prescription. To ensure future long-term protection for the significant fish and wildlife resources within the Copper and Bering River watersheds, the Recommended Wilderness Management Area prescription may be the best option.

However, even the Wilderness prescription may allow activities such as mining, roads, trails, hardened campsites, and motorized access. Depending on the location and magnitude of these activities, even this prescription could cause major impacts to fish and wildlife resources. To ensure significant fish and wildlife habitats within the Copper and Bering River watersheds are protected, we recommend managing specific unique and/or sensitive areas as Research Natural Area or Primitive prescriptions; or managing activities allowed under the Wilderness prescription so they are located far enough away from these significant species and their habitats so as not to impose any direct, indirect, or cumulative impacts.

The Wilderness prescription allows motorized access into the Copper River by boat, snowmachine, and airplane for subsistence uses. We recognize the importance of subsistence activities, however, access by boats, off-road vehicles, plane, and foot could cause significant disturbance and long-term damage to sensitive areas that include salmon spawning, bird nesting, and bird migration habitats. We believe these sensitive areas should be carefully monitored, and if the results indicate human access is causing major impacts to the species and/or associated habitats, protection measures should be implemented to ensure the conservation of healthy fish and wildlife populations.

The proposed access road to Chugach Alaska Corporation land is depicted in all of the alternatives. As indicated on page A-6 of the Draft EIS, an easement was granted to the Chugach Alaska Corporation on March 2000, for the Martin River corridor. The route for the second

corridor, located from the Bering River coalfields to an anticipated marine terminal at Katalla, could vary, depending on "site-specific resource needs." Due to the valuable fish and wildlife resources within the Bering and Copper River watersheds, we are concerned about the road proposal. Direct impacts from the road construction and footprint include disturbance to and loss of fish and wildlife and their habitats, disruption of stream and wetland hydrology, and habitat fragmentation. If the road is open to the public, human disturbance impacts could cause even greater damage by spreading to adjacent habitats. Final placement of the road corridor should be based on a thorough evaluation of both the direct and indirect impacts to fish and wildlife habitats located near the road footprint, including impacts that would result from allowing public use of the road, and consideration of siting, construction techniques, management options, and other alternatives that will avoid, reduce, and compensate for these impacts.

If a viable purpose and need is established for the route to Katalla, we recommend an alternative be chosen that avoids and minimizes to the greatest extent possible, impacts to fish and wildlife and associated habitats. In your range of alternatives for the Katalla route, we recommend "no build" options also be included if the purpose and need can be met in other ways.

Montague Island We believe the Fish and Wildlife Conservation Management Area prescription designated in your preferred alternative will not provide the necessary protection for fish and wildlife species using Northern Montague Island. Northern Montague Island provides vital spring migration feeding habitat for a significant fraction of the world's population of surfbirds that feed on the herring substrate occurring within the intertidal habitat. The shoreline and adjacent marine waters are also key feeding and resting habitat for highly diverse and abundant populations of shorebirds, seaducks, seabirds, and bald eagles. Marine waters surrounding Northern Montague Island also support important seabird forage fish, such as sandlance and capelin; harbor seals; killer and humpback whales; and many other species.

Some of the major activities allowed under the Fish and Wildlife Conservation Management Area prescription that could impact these important fish and wildlife and associated habitats within Montague Island include mining; roads; motorized access; recreational facilities such as campgrounds, cabins, and trails; and boat docks and ramps. To adequately protect fish and wildlife within the Northern Montague Island vicinity, we recommend that a more restrictive prescription such as Primitive or Natural Research Area be applied to the area that extends from Zeikof Point to approximately 1-2 miles south of the southwestern boundary of Port Chalmers. Due to the significant shorebird feeding and migration habitat within coastal Northern Montague Island, we also recommend that hardened campsites not be allowed in this area and that a special designation be applied within a 1,000-foot beach buffer, restricting boat landings (including kayaks) and any other type of public use and access from April 15 to May 25.

Knight, Hinchinbrook, and Porpoise Island Most of the land within Knight and Hinchinbrook Islands has been designated a Back Country prescription (with a non-motorized emphasis) in your preferred alternative. The Back Country prescription will allow activities that include new roads and trails, cabins, hardened campsites, day use facilities, campgrounds, boats, docks, and some motorized access. Due to the significant fish and wildlife resources on these islands, we recommend a more restrictive prescription be applied. We recommend revising your preferred alternative by applying prescriptions in Alternative D (Wilderness with a small portion of a

Research Natural Area at NE Hinchinbrook Island) to these areas. These prescriptions will reduce the amount of intrusive activities, thus allowing greater protection for important fish and wildlife resources that use Knight and Hinchinbrook Islands.

The Back Country prescription was also designated on Porpoise Island in the preferred alternative. Porpoise Island supports very large seabird colonies that include black-legged kittiwake, common murre, horned and tufted puffin, and glaucous-winged gull. Marine habitat adjacent to the island also provides substrate for capelin spawn, an important forage item for seabirds. We recommend that the prescription for Porpoise Island be changed to either Research Natural Area or Primitive to ensure greater protection to these significant fish and wildlife resources. In addition, we recommend that hardened campsites not be allowed in these areas and a special designation be applied to prohibit all public access such as boat landings (including kayaks) or any other type of public use between April 15 and August 31.

Channel Island In your preferred alternative, the Fish and Wildlife Conservation Management prescription has been designated for Channel Island. Channel Island supports abundant and diverse fish and wildlife resources that include arctic tern, pigeon guillemot, and tufted puffin seabird colonies; harbor seal haulouts; and significant capelin and herring spawn that is a vital food source for numerous seabirds. We are concerned that the type of activities allowed in this prescription (e.g., mining; roads; motorized access; recreational facilities such as campgrounds, cabins, and trails; boat docks; and boat ramps) could have major impacts on these resources. Due to the significant fish and wildlife resources at Channel Island, we recommend a more restrictive prescription, such as Research Natural Area or Primitive, be applied. In addition, we recommend that hardened campsites not be allowed in these areas and a special designation be applied to prohibit any public access such as boat landings (including kayaks) or any other type of public use between April 15 and August 31.

Lands adjacent to Harriman, Nassau, and College Fiords; Serpentine, Long, Whale, Kings, Icy, and Wells Bays; Naked, Seal, Agnes, Fool, Little Smith, and Smith Island; Unakwik Inlet; and Port Nellie Juan The Wilderness Management Area prescription for these areas will limit impacts to fish and wildlife and associated habitats by not allowing activities such as campgrounds, timber harvest, and boat docks. However, activities such as mining, recreation cabins, hardened camping sites, new trails and roads, and fixed-wing flightseeing landings are allowed, and depending on their location, could adversely impact important fish and wildlife resources. For most areas in this region we concur with your preferred Wilderness Management prescription, provided the allowable activities are located far enough away from important fish and wildlife resources to prevent any direct, indirect, or cumulative impacts.

However, we are aware of some specific areas where activities allowed under the preferred Wilderness prescription could adversely impact significant bird breeding and forage habitat. We recommend these areas be re-designated to either the Research Natural Area or Primitive prescriptions. These areas include Little Smith Island, Serpentine Bay/Island, Fool Island, Agnes Island (south of Naked Island), Jackpot Island, and Seal Island--where significant seabird colonies, seabird foraging areas, and/or, harbor seal haulouts occur. Some of these areas were oiled by the *Exxon Valdez* oil spill. Seabirds in these and other areas are still recovering from that 1989 spill and have also declined due to a climatic regime shift in Prince William Sound

(PWS)-Gulf of Alaska (Irons et al. 2000, Agler et al. 1999). In addition, we recommend that hardened campsites not be allowed in these areas and special designations be applied to prohibit public access from activities such as boat landings (including kayaks) or any other type of public use between April 15 and August 31.

Within PWS, Kittlitz's murrelet summer feeding habitat occurs within marine waters adjacent to many of the tidewater glaciers and glacial stream outflows. Many of the tidewater glaciers and glacial stream outflows are located adjacent to land designated as Wilderness in the preferred alternative. This species nests on the ground on or near mountain tops in unvegetated scree fields and cliff faces, particularly near glaciers or previously glaciated areas. We are concerned about impacts to Kittlitz's murrelet because they are rare, have a patchy distribution (Day et al. 1999), and populations are declining in PWS (D. B. Irons unpublished data). Boat disturbances within summer foraging areas are a potential threat to the birds' survival. The Fish and Wildlife Service (FWS) plans to initiate a study in 2001 to determine the distribution of Kittlitz's murrelets in their summer foraging habitat and to assess potential boating impacts within these areas.

Coastal Habitat near Hobo Bay The preferred alternative prescription for this area is Back Country with a non-motorized emphasis. This is also identified as most favorable for mineral potential. The Back Country prescription will allow mining; recreational facilities such as cabins, day use facilities, campgrounds, and trails; new roads; boat ramps; and docks. The shoreline and adjacent marine waters, approximately 2 miles north of Hobo Bay, are used by a high number of seaducks and seabirds, and many bald eagle nests occur in this area. We believe the activities allowed under the Back Country prescription could negatively impact these species. We are also concerned mining activities could impact these species, if the mining operations are located near their habitats. Numerous waterways from upland areas (where mining may occur) drain into this area. To avoid disturbing this important bird use area, we propose the prescription be changed to Wilderness. A 1,000-foot shoreline buffer may also adequately protect the birds, provided nearby activities, such as loud noises or mining activities, have no adverse effect on them or their habitat. The boundaries of our recommended designation or buffer near Hobo Bay should be determined by defining an area where allowed activities within the Back Country areas will not have any direct or indirect impact on these species and their habitat.

Kenai Peninsula We recommend that the following CNF Planning Units adjacent to the Minimal Management and Wilderness Zones boundaries of the Kenai National Wildlife Refuge (NWR) be placed in Management Category 1, prescription 131 (Recommended Wilderness Management Area): K055, K057, K062, K064, K320, K061,K321, K323, K324, K325, K322, K326, K134, K327, K328, K142, K233, K234, K235, K257, K259, K260 and the southwestern portion of K258. We also recommend that the following CNF Planning Units adjacent to the Minimal Management and Wilderness Zones boundaries of the Kenai NWR be placed in Management Category 1, but in prescription 111 (Primitive): K036, K044, K045, K050, K052 and K053.

This recommendation would include the continued use of snowmobiles in those units, but snowmobile use should not be allowed above timberline to protect the alpine winter habitat of the Kenai Mountains caribou herd. This will protect the caribou herd from disturbance from snowmobiles during the stressful winter period, and protect potential brown bear wintering/den habitat on steep, alder covered slopes. Further, this recommendation could continue to allow

winter snowmobile access on the Resurrection Trail itself and in watersheds to the east of the Resurrection Trail where the Kenai Mountains caribou are less likely to overwinter.

We believe these recommendations would provide a comparable management prescription to the adjacent CNF watersheds as on the Kenai NWR, but in some areas would have the added advantage of a distinct manmade boundary (the Resurrection Trail) for recreational users. All of the other boundaries of the Kenai NWR that are important to conserving wildlife and biodiversity on the Kenai Peninsula are being compromised by rapidly increasing residential development, roads, utility corridors, logging, various forms of habitat destruction, alteration, disturbance and fragmentation. By consolidating its CNF/Kenai NWR boundary with similar management prescriptions (i.e., Recommended Wilderness Management and Primitive prescription), the CNF plan can significantly increase its effectiveness in conserving wildlife and biodiversity on the Kenai Peninsula. This is a unique opportunity to put ecosystem management principals into practice and combine both agencies' goals and objectives in an interagency effort to sustain the Kenai Peninsula's natural resources for the long-term benefit of the public.

We believe a recommended Wilderness designation/prescription would provide greater protection for wildlife and biodiversity, including brown bears, wolves, lynx and wolverine compared to the preferred alternative Back Country (winter motorized allowed), Brown Bear Core Area, and Fish and Wildlife Conservation Area prescriptions for these units. These latter prescriptions would continue to allow human activities and development (example: utility corridors), that could be detrimental to wildlife conservation and maintaining biodiversity on the Kenai Peninsula and give less protection to brown bears and their habitats.

Additional Research Natural Area Prescriptions We have made recommendations for either Research Natural Area or Primitive Prescriptions to be applied to significant habitat areas within the Copper/Bering River watersheds and Northern Montague, Little Smith, Serpentine, Fool, Agnes, Jackpot, Porpoise, Channel, and Seal Islands. We support the four new Research Natural Areas prescriptions proposed in your preferred alternative located at Copper Sands, Olson Creek, Wolverine Glacier, and Kenai Lake-Black Mountain. Due to their unique vegetative features, we also recommend that 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) be included as Research Natural Areas in the final Forest Plan

Standards and Guidelines We believe the Forest Plan should include additional opportunities for timely incorporation of new issues and site-specific scientific information into forest management. Methods for adaptive management (for incorporation of new information) should be included in the Standards and Guidelines. Standards and Guidelines included in the Forest Plan are vague and will not, we believe, provide for the intended accountability because compliance will be difficult or impossible to measure. We recommend that standards be measurable objectives for management practices, and that guidelines provide recommendations for achieving the standards. We recommend that wording like "where possible," "normally," "generally," "minimize," and "to extent feasible," be replaced with wording that provides specific and measurable stipulations on management activities. Our more specific recommendations can be found throughout these comments.

SPECIFIC COMMENTS
CHUGACH NATIONAL FOREST LAND AND MANAGEMENT RESOURCE PLAN

Page 2-3, Recreation and Tourism The objective (last bullet) that provides for interpretive and conservation education should specifically mention minimizing disturbance to wildlife in conjunction with recreational activities. This would include avoidance of marine mammal interactions in conjunction with use of coastal areas.

Page 2-9, Last Paragraph We concur with your guidelines to avoid disturbing important wildlife areas when designing and locating facilities and to apply seasonal restrictions when necessary. In addition to incorporating seasonal restrictions on human activities, this guideline should include incorporating (where possible) information regarding minimizing human/wildlife (e.g., marine mammals, nesting shorebirds) interactions (i.e., through interpretive signs, educational materials included with use permits, etc.).

In our comments on subsequent sections of Chapter 2, we have included recommendations for seasonal access restrictions to protect sensitive wildlife areas within PWS. FWS will contact CNF staff if they become aware of additional areas that require seasonal access restrictions.

Page 2-10, Table 2-1 The habitat listed for sea otters should be changed to "intertidal/subtidal,' and the sensitivity should include feeding as well as pupping. Seasonality should read "year-round, with pupping peaks April-July."

We also recommend adding Kittlitz's murrelet and marbled murrelet to this table, since neither are covered under Seabird Colonies. They could be combined as *Brachyramphus* species. Both species feed very near shore, and are often in the intertidal zone, especially at high tide, although always on or under the water. Juveniles especially feed close to shore, and would be present there from mid-July through mid-September. Feeding should be listed under the sensitivity column and May through August should be listed under the seasonality column.

The dates for pigeon guillemot should be changed in the seasonality column to "May through mid-August." Black oystercatcher seasonality should be changed to "early May - late July." Add "concentrations" to shorebirds/intertidal, change the seasonality to "late April through late May," and the following line should also be added "Shorebird/intertidal concentrations: Feeding: mid-July to early October."

Page 2-10, Paragraphs 1 and 3 Standards for Steller's Sea Lions/Other Marine Mammals should also include guidance for potential impacts from boats, in addition to standards to avoid aerial and land impacts. The Marine Mammal Protection Act (MMPA) specifically prohibits harassment of marine mammals. In general, marine mammals should be avoided and under no circumstances should animals be handled. Although there are no specific criteria outlined in the MMPA for avoiding harassment, the National Marine Fisheries Service has developed viewing guidelines which should be included. These guidelines include, among other recommendations, remaining at least 100 yards from marine mammals, not feeding or handling animals, not pursuing animals and minimizing noise or presence.

Standards developed in the draft Forest Plan to protect marine mammals from human activities include establishing a 3,000-foot landward and seaward buffer around Steller's sea lion and harbor seal haulouts, rookeries, and pupping areas, where human activities are long-term and concentrated, and establishing a 750-foot upland buffer in areas where human activity occurs. Please clarify in your revised document the difference between "long-term concentrated human activities" where a 3,000-foot buffer is proposed and "human activity" where only a 750-foot buffer is proposed. Depending on the type of disturbance, short-term unconcentrated activities, such as motor boat use, could have just as severe an impact as long-term concentrated human activity. Thus, unconcentrated short-term activities may also require a 3,000-foot buffer.

Establishment of buffer zones to prevent disturbance to marine species, such as sea otters, is very important and we agree they should be included in the Forest Plan standards. Buffer zones can be hard to determine because of the variation in disturbances and the distance the species will respond to disturbance. Monitoring of marine mammal use areas should occur to ensure buffers are adequate, and if they are not, the buffers should be extended.

Page 2-11, Guidelines for Seabird Rookeries, Waterfowl, and Shorebird Habitat Management
We agree on the importance of buffers for these species and are encouraged that the USFS has included them in their draft management plan. To ensure protection of these species and prevent any violations of the Migratory Bird Treaty Act, we recommend that the management direction for these species be changed to "standards" instead of "guidelines," since guidelines are only optional advisable courses of action and standards are actions that must be followed. Once adequate buffer sizes are determined in the final revised Forest Plan document, we recommend that monitoring studies be conducted to ensure these buffers are adequate. The buffer size(s) determined in the final Forest Plan document should include a clause stating that buffers could be subject to change based on future research and monitoring data.

Page 2-11, Guidelines for Seabird Rookeries These guidelines provide recommended buffers for aircraft and land activities, however, no buffers were recommended for marine activities. Since it is well documented that human activities, like operating marine watercraft, can adversely impact birds, causing egg mortality, abandonment of nest and young, collisions and injuries, energy expenditure, and other adverse effects (Murphy and Suring 1999), we recommend that a marine buffer also be applied.

We believe more information is needed to determine distances that adequately protect nesting seabirds from marine, aircraft, and upland activities in PWS. This information should come from reviewing existing literature on the distances breeding seabirds respond to disturbances and conducting studies on seabird colonies in PWS to measure disturbance responses from different types of activities that occur within the air, marine, and upland environments.

When reviewing development projects proposed near seabird colonies, the FWS typically recommends that activities not occur within 1 mile of the colony, in order to ensure the birds are adequately protected. However, because responses of breeding seabirds to disturbances may vary between colonies, even for the same species within the same geographic area, it may be difficult to establish one buffer that will apply to all colonies. There could also be variations of sensitivity during different stages of their breeding cycle and a few colonies in Alaska may have habituated

to adjacent disturbances. One possible way to deal with this variation is to allow activities such as wildlife tour boat cruises closer to a few designated seabird colonies that are known to have habituated to this type of activity and to conduct research on other colonies to determine adequate buffers.

Page 2-11, Paragraph 2 We are concerned that a 1500-foot buffer is not adequate to protect seabird colonies from aircraft disturbances. Although specific information is not available on PWS species, information from other areas (Mehlum and Bakken 1994) recommend a 3-kilometer (9821-foot) buffer to reduce mass panic flights by breeding murres and kittiwakes in response to helicopters and fix-winged airplanes. As stated above, more information is needed to determine buffer sizes that will adequately protect breeding seabirds from disturbances.

Page 2-11, Paragraph 3 It is unknown if a 750-foot buffer will adequately protect seabird colonies from human activities occurring in upland habitats. Depending on site conditions and the type of activity occurring, for some areas this buffer may be more than adequate and for other areas a 750-foot buffer may not be large enough. Further research and monitoring is needed to determine buffer size(s) that will ensure protection to all colonies.

Page 2-11, Waterfowl and Shorebird Habitats Management The recommended buffers for waterfowl and shorebird habitats that include intertidal concentration areas and nests should also include marine buffers, since certain activities in the marine environment can have major impacts on these species. Further research and monitoring is needed to determine how large these buffers should be. Ducks and loons disturbed by boats responded at varying distances up to 1 kilometer (3,274 feet) in studies summarized by Murphy and Suring (1999).

Page 2-11, Paragraph 5 Based on studies summarized by Murphy and Suring (1999), disturbances to shorebirds and waterfowl in their nesting and foraging habitats ranged from 18 (59.04 feet) to 800 (1000.4 feet) meters. The 330-foot (100.65 meters) buffer suggested in this section's guidelines will not protect species that require a larger buffer. A 1,000-foot beach buffer previously recommended by Andres (pers. comm. 1999) would ensure much greater protection to foraging shorebirds and waterfowl than a 330-foot buffer; therefore, we are recommending that USFS increase the buffer for protecting foraging birds in intertidal concentration areas to 1,000 feet. A 330-foot buffer is also unlikely to be large enough to ensure most nesting shorebirds and waterfowl are protected from human disturbances occurring on the ground. More information is needed to establish buffer sizes that will ensure protection to nesting and feeding waterfowl and shorebird species occurring within CNF.

Page 2-11, Paragraph 6 It is not clear if this statement refers to existing or new roads. Please clarify this section. We agree that existing roads should be closed seasonally or year-round to prevent access into important waterfowl and shorebird habitats. To prevent impacts to shorebirds and waterfowl and prevent the need to regulate human access, we recommend that new roads not be built within or near these important habitats.

Page 2-11, Paragraph 7 We are concerned that a 330-foot buffer will not adequately protect black oystercatchers from human disturbances occurring on the ground. Breeding black oystercatchers are vulnerable to disturbance because of their inconspicuous nests and intolerance

to encroachment (i.e., adults may wait for intruders to leave the area until returning to the nest). More information is needed to define how large a buffer is required to ensure varying types of activities, both on the ground and in marine waters, will not impact nesting black oystercatchers.

Page 2-12, Line 379 The Interagency Agreement between the FWS and the USFS commits to establishing and maintaining a minimum 330-foot buffer zone around bald eagle nests. Depending on site conditions and the type of activity, this zone could extend as far as 660 feet. Therefore we recommend that you change this sentence to read "There is a minimum 330-foot radial retention zone around known eagle nest locations."

Page 2-12, Line 399 We believe the Standards for Bear Habitat Management for CNF-wide application are inadequate. The Interagency Brown Bear Study Team (IBBST) on the Kenai Peninsula has documented that brown bears utilize areas up to 2 kilometers away from salmon streams for feeding and loafing. This is the "best science" available now and is based on thousands of bear observations. The 750-feet buffer zone proposed in the Forest Plan is not sufficient to provide cover for brown bears while feeding, or between brown bears and humans.

Page 2-13, Line 428 Item number 3 (osprey) should be moved from the Mountain goat section to the Raptor Nest Protector section on the previous page.

Page 2-23, Line 579 The standards for garbage should be the same as for food. If the USFS requires bear-proof containers for food, then they should also require bear-proof containers for trash at all campgrounds, picnic sites, and other facilities. Trash and garbage attract bears just as much as food.

Page 3-21, Paragraph 3 The Forest Plan states that new recreation cabins may be constructed for public health and safety. The Final EIS should clarify if the new cabins would be constructed in new areas or if they will replace cabins within existing footprints. The impacts of replacing a cabin within an existing footprint would be different from building a cabin in a new area.

Page 3-55, Line 1231 While the purpose of this theme is appropriate, it lacks the specificity needed to ensure appropriate protection for a species which requires large tracts of relatively undisturbed and unfragmented habitats. Lack of quantified population objectives for brown bears on the Kenai Peninsula creates an uncertain situation for this vulnerable population. We suggest the population objectives be stated here.

Page 3-55, Line 1236 The Management Intent for this Ecological System's desired condition, for "Ecological processes relatively undisturbed by human activity," appears to allow activities that could disturb ecological processes, and thus, brown bears would not be adequately protected. The impression left by this paragraph is that it is the type of habitat that is critical to brown bears ("varied habitat types, age classes, structural stages, maintain habitat quality, associated species, managed vegetation"), however, based on findings from the IBBST, it is the food resource--salmon--that is critical to brown bears, not vegetation. Because it is critical that this food resource be available in undisturbed feeding areas, the building of campgrounds, roads, and trails to increase human fishing and use of anadromous streams and adjacent areas is not good for bears. In order to achieve the intent of this Management Prescription and to avoid increasing

bear/human conflicts, we believe human access should not be improved in the Brown Bear Core Management Area.

Page 3-55, Line 1253 We are concerned that conflicts are inherent in the current juxtaposition of activities allowed here and in adjacent areas. It appears that the Recreation Opportunity Spectrum (ROS) includes situations which are not compatible with the Brown Bear Core Management Area designation, e.g., Roaded Natural, which would allow resource modifications, developed sites, and motorized uses. The ROS of Semi-primitive Groups includes high concentrations of users and large groups of up to 100 people, with a low probability of experiencing solitude, closeness to nature, and tranquility. This high use would not be compatible with brown bears. The contradictions in this paragraph should be remedied to produce a desired condition more suitable for brown bears. For example, a number of activities, while not usually present, are not prohibited, under the Roaded Natural ROS (e.g., modified scenery, campgrounds, minor tourism developments, roads, motorized recreation opportunities, trails, hardened campsites and historic structures, maintaining or replacing existing cabins). These activities would not minimize bear-human interactions, which is supposed to be a priority in this area. Clarification is needed on how new cabins could minimize bear/human conflicts, and why this prescription appears to allow for increasing human use of Brown Bear Core Management Areas.

Page 3-56, Lines 1280-81 We are concerned with the statement that, while discouraged, utility corridors, power generation facilities, power transmission lines, marine transfer facilities, and administrative facilities may be allowed. All of these developments will need roads in one fashion or another. One IBBST issue of concern is that cumulative developments threaten the Kenai Peninsula's brown bear population. There is an abundance of literature concluding that roads have negative impacts on bears. We believe this prescription needs to be rewritten to better protect brown bears, e.g., where no alternatives are feasible, access road use will be restricted to that essential for use of the facility only.

Page 3-57, Brown Bear Core Area Management Area - Activities Table The table lists Marine Transfer Facilities with an "N" meaning the activity is not permitted. However reading the text of the Brown Bear Core Management Area on p. 3-56 it states " . . . marine transfer facilities and administrative facilities are discouraged in this management area. They may be allowed if no feasible alternative is available." One says it is not permitted, the other says it may be allowed. We recommend such facilities not be allowed in Brown Bear Core Management Areas and the discrepancy between sections be rectified.

Page 3-58, Line 1301 Under the Forest Plan, authorization of geophysical prospecting is to include terms and conditions controlling operating methods and times to prevent or control adverse impacts and prevent negative human-bear interactions. The Kenai NWR implemented similar restrictions when authorizing 3D-seismic survey activity by subcontractors to oil and gas companies on the refuge in 1998. Although stipulations were included on the permit to protect bears, a brown bear sow with cub were observed abandoning a den site where a survey worker "fell" into the mouth of the den. A week or two later another survey worker was killed by a brown bear boar that was disturbed from its den by a crew of several men laying wiring for explosives. It is impossible to know where all the dens and bear locations in an area are to

properly apply stipulations to special use permits for geophysical prospecting. We believe the only guaranteed way to avoid bear/human interactions is to not allow intensive use in Brown Bear Core areas.

Page 3-58, Line 1309 It is unclear how the USFS will reduce bear/human interactions by creating recreation/tourism developments. With regard to guided bear viewing, the IBBST has opposed commercial brown bear viewing on the Kenai Peninsula.

Page 3-59, Line 1329 We believe that allowing roads for conducting minerals operations would negatively impact brown bears and is contrary to the primary purpose of Brown Bear Core Areas.

Page 3-60, Line 1357 This paragraph should clarify when Administrative facilities would be allowed or deemed necessary for effective management of brown bear habitat.

Recreation Impacts - PWS (see also pages 3-81 through 3-92) The FWS expressed many concerns about the impacts increased human access into PWS will impose on fish and wildlife resources in their November 22, 1999, letter to Alan Vandiver, Chugach National Forest Interdisciplinary Team. We believe the USFS, other State and Federal resource agencies, and private organizations have a unique opportunity to offer greater protection to these important resources by working together and using proactive management strategies. Studies conducted by Murphy and Suring (1999) are extremely valuable to help determine current and projected future human use patterns in PWS. The use of this information, in combination with species distribution maps, will help project where impacts will occur and give resource managers an opportunity to implement management strategies before long-term, irreversible impacts can occur.

For example, we are aware of an unfunded USFS study proposal to evaluate boat anchoring within PWS eelgrass beds. Documenting the locations where boaters are anchoring in PWS eelgrass beds will help determine popular mooring areas. Eelgrass is among the most productive coastal habitats in the world. It provides numerous functions that include: supporting a complex trophic food and detritus-based food chain, sediment and nutrient filtration, providing buffers to shorelines against wave action, sediment stabilization, and serving as breeding and nursery areas for finfish and shellfish (Short and Wyllie-Echeverria 1996). Permanent anchoring structures could then be placed in nearby habitats, which are less valuable and where eelgrass does not occur, thus preventing future impacts to the eelgrass beds.

The placement of any future recreation facilities should be carefully planned, ensuring that direct, indirect, and cumulative impacts of the activities are evaluated. Even activities that may seem innocuous such as hardened campgrounds, can cause major impacts to fish and wildlife resources. New recreational facilities should be placed in areas that avoid and minimize impacts to fish and wildlife and associated resources. Concentrating new recreation facilities in less biologically significant areas, such as Passage Canal and Esther Island, can help take the pressure off of areas where more sensitive fish and wildlife habitats occur.

Mineral Development (see also pages 3-93 through 3-95) There are no defined, measurable specifications upon which to determine or monitor potential impacts from mineral development