STATE OF ALASKA

OFFICE OF THE GOVERNOR

DIVISION OF GOVERNMENTAL COORDINATION

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May 24, 1989

Mr. Dalton DuLac
Forest Supervisor
Chugach National Forest
201 E. Ninth Avenue, Suite 206
Anchorage, AK 99501

Dear Mr. DuLac:

The State of Alaska has reviewed the Big Islands Management Area Draft Environmental Impact Statement (DEIS). This letter contains the consolidated comments of state agencies.

Background

Chugach Alaska Corporation (Chugach) owns commercial timber land on Montague Island. Chugach seeks U. S. Forest Service (USFS) authorization to construct approximately 35 miles of road from a log transfer facility site in MacLeod Harbor to its timber lands in the Patton Bay-Beach River area. Chugach has concluded that a log transfer facility (LTF) in Patton Bay is not economically feasible. High wave energy on the east coast of Montague Island apparently requires considerably greater costs to construct and maintain an LTF in Patton Bay than the costs of constructing a road and hauling timber to MacLeod Harbor. Chugach has argued that the USFS is obligated to provide reasonable access to their lands which were aquired under the Chugach Region Study Agreement pursuant to the Alaska Native Claims Settlement Act (ANCSA) and Section 1430 of ANILCA.

The USFS is entitled, under terms of a negotiated settlement with appellants of the Chugach National Forest Land and Resource Management Plan, to harvest up to 36 mmbf from the Big Islands Management Area. However, before harvesting this timber or making any other significant resource management decisions in this area, the USFS is required by the negotiated settlement and applicable federal laws to evaluate the impacts of their proposed decision and to balance the needs of all forest resources, including fish and wildlife, to achieve multiple use.

The Preferred Alternative

Originally the USFS preferred alternative (Alternative 5) included, among other things, proposals authorizing construction

of a 35-mile access road linking private lands at MacLeod Harbor and Patton Bay, 28 additional miles of spur roads to access timber stands on public lands, harvest of 36 mmbf of old-growth timber on 1,151 acres of public lands, recreational improvements, and fish habitat enhancement. On April 19, however, the USFS announced that the new preferred alternative has been narrowed to include only a special use permit to Chugach for the access road between MacLeod Harbor and Patton Bay. This change, as well as an extension of the original DEIS comment period, occurred as a result of the Exxon Valdez oil spill.

State Recommendation

Based on a review of the DEIS and the state agency observations of impacts from the oil spill, the state supports the approval of a special use permit for a road between MacLeod Harbor and Patton Bay subject to the following stipulations:

- the road shall be temporary and used solely for the purpose of one-time entry to harvest timber (estimated eight years) on privately-owned Chugach lands, and the route be restored and rehabilitated following harvest; and

- all stream crossings of fish habitat be installed and maintained during road use pursuant to Title 16 Permit requirements, and removed with the roadbed when no longer needed.

The state further recommends that additional proposals for supplemental access to USFS lands for timber harvesting and developed recreation not be approved at this time. Such proposals on public lands should only be further considered after a regional analysis of oil spill impacts and recovery trends to determine what role south Montague Island may have in replenishing diminished populations that may be important to the general recovery of Prince William Sound. Fish enhancement proposals identified in Alternative 5 that could be accomplished under the above recommendation should be retained.

The state's recommendation is based on the following rationale:

- The primary objective of this decision-making process is to address reasonable access to Chugach lands. The conditional special use permit accomplishes this.

- Chugach's private holdings around Patton Bay contain some of Montague Island's best timber lands and wildlife habitat. Since these areas are slated for clearcutting, the USFS should dedicate adjacent public lands to mitigate expected impacts by emphasizing habitat protection until and unless additional analysis demonstrates that development would be

environmentally sound.

° Preliminary data indicate that bald eagle and marbled murrelet populations in Prince William Sound may have been significantly affected by the oil spill. These two species are old-growth dependent and would be impacted by logging and associated disturbances. Because south Montague Island received only light oiling while other southern and western portions of the Sound were heavily or moderately oiled, the maintenance of healthy populations in this area through protection of their habitat on Montague may be critical to the recovery of wildlife in the Sound.

° Since the long term effects of the spill can only be estimated at this time, additional analysis at a later date would provide more definitive data about the recovery of the Sound and Montague Island's ability to assist in the recovery. While data is not available, permanent road development and other improvements at this time may place undesirable stress on populations that may already be strained by the spill.

° The state's recommendation fully complies with the spirit and intent of the Governor's recent Administrative Order 112 (Attachment I) concerning recovery of Prince William Sound following the oil spill.

° Over 24 anadromous fish streams occur from MacLeod Harbor to Patton Bay. Although the commercial fishery values of these streams are relatively low compared to other districts in Prince William Sound, they contribute to the overall commercial fisheries harvest. Several of the streams, including the Nellie Martin River and San Juan River, have high recreational fishing values. These streams currently provide a relatively unique opportunity for wilderness recreational fishing using wheel plane access. Developing road access to these streams will diminish wilderness angling opportunities for wheel plane recreationists. Streams on south Montague were apparently minimally affected by the oil spill and thus their importance to fisheries in the Sound may increase, particularly if portions of the Southwest District are closed this year to commercial fishing because of oil contamination. Stream habitats could also be adversely affected by stream crossings and by logging. Impacts from stream crossings could be mitigated through adherance to Title 16 permitting requirements.

° Since the Chugach National Forest Land Management Plan is already scheduled for update and revision in 1994, this may be an appropriate vehicle for addressing long-term developments on public lands on Montague Island. As an alternative, a supplemental EIS could be prepared.

Environmental Impact Analysis

The state believes that the environmental impact analyses in the DEIS concerning fish and wildlife populations and habitat is inadequate. Specifically, some statements in the document contradict other statements, available data are not always appropriately utilized, and some of the conclusions are questionable. These concerns are discussed in detail in the Alaska Department of Fish and Game's technical comments (Attachment II, enclosed).

Use of Tidelands

As the Forest Service is aware, the state believes that based on the Utah Lake decision, tidelands adjacent to the National Forest are state owned. This issue is currently in Superior Court and our comments here do not address tidelands ownership. However, the state notes that any proposed use of tidelands (e.g. log transfer facility) would not be binding upon the state. The state would address utilization or non-utilization of tidelands during the normal adjudication and permitting process. We also request that the state's Prince William Sound Area Plan be referenced in the EIS.

Alaska Coastal Management Program

The state has completed a preliminary review of this document in light of the Alaska Coastal Management Program (ACMP). Based on the information presented, it appears that the plan will be consistent with the ACMP. A conclusive review will be made after the final EIS has been issued for public review.

Thank you for the opportunity to comment on this plan. If you have any questions, please do not hesitate to call this office.

Sincerely,

Robert L. Grogan
Director

by: Sally Gibert
State OSU Coordinator

Enclosure

csu3/27

cc: Commissioner Lenny Gorsuch
Department of Natural Resources

Commissioner Don W. Collinsworth
Department of Fish and Game

Commissioner Dennis D. Kelso
Department of Environmental Conservation

Commissioner Mark S. Hickey
Department of Transportation & Public Facilities

Denby Lloyd
Office of the Governor

csu3/27

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May 25, 1989

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[1239] Mr. Rob Walkinshaw, Department of Natural Resources Resources Allocation Section, Anchorage
[1240] Mr. Dan Wilkerson, Department of Environmental Conservation, Anchorage
Mr. Sundberg, Dept. of Fish and Game, Anchorage

ATTACHMENT II

Additional Specific Comments on Big Islands DEIS

Background

The Department of Fish and Game (ADF&G) has actively participated with the Forest Service (FS) in the Big Islands Management Area Analysis process since January, 1988. Our participation has included attending numerous working group meetings, making ADF&G information on fish and wildlife resources and human uses of fish and wildlife available and assisting the FS in interpreting this information, participating in public meetings, providing written and verbal comments on draft interim products, and conducting limited studies with FS funding support to document anadromous fish distribution on south Montague Island, assess deer hunter use, and assess relative levels of deer use in various habitat types.

Anadromous Fish Streams

The DEIS proposes riparian zone management prescriptions that should help to mitigate direct impacts of logging on stream habitats on FS lands in FS designated "high-priority" streams. However the FS proposes a lower level of protection for other stream habitats which could negatively impact overall fish production in the area. The mitigation of impacts to stream habitats from logging on Chugach lands are under the control of Chugach and no guidelines are presented to evaluate what, if any protection of stream habitats will occur on Chugach lands. Fishery enhancement projects identified in the DEIS are at a conceptual phase and have not been field verified. Therefore, their potential to meaningfully increase fish production in the region is unknown. It is unlikely that all of the proposed projects will prove to be biologically and economically feasible. It is more likely that management decisions that provide a high level of protection to existing fish habitat will produce more fish in the long term than reliance on the proposed enhancement projects to offset potential impacts from management proposals in the DEIS including roading and logging.

Black-tail Deer

The DEIS recognizes that the most preferred deer winter habitat is characterized by mid-volume mature commercial forest stands on south aspects at low elevations in areas of relatively low snow depths. ADF&G studies indicate that high-volume mature forest lands are also preferred deer winter habitat (Schoen et.al. 1984).

The DEIS further recognizes (p. 4-31) that timber harvest reduces the carrying capacity of deer winter range. Once preferred deer winter habitat is harvested, it is not replaced within the standard timber rotation period (100 years), as the forest stands do not achieve the characteristics required for winter range.

Map F in the DEIS depicts the existing vegetation on south Montague Island. Under the proposed alternative, all of the identified commercial forest stands on USFS lands will be accessed by the road and harvested. However, the USFS anticipates that under the preferred alternative, timber harvest will reduce deep snow (critical) winter habitat by only 13%, 13% and 2% in subunits 35, 36 and 37 respectively (p. 4-34). Based on Map F, and the known winter habitat requirements of black-tail deer, we question these figures and suggest that they be reevaluated.

Map F indicates that essential winter habitat vegetation (mature forest providing snow interception canopy) is not present along the southern beach fringe or on the south east peninsula of Montague Island from Jeanie Pt. north to Pointed Rock. However, the USFS (Map D) has identified these areas as containing key deer winter range. It is our understanding, based on studies conducted in southeast Alaska, that important (key) deer winter range is characterized by high and mid volume commercial stands that provide substantial canopies for snow interception during winter. We find these map classifications very contradictory and request the USFS to review their decisions and provide information justifying their classification. The net effect of these classifications is to "reduce" the impacts to deer under alternative 5.

The DEIS states (p. 4-33) that approximately 65% of the deep snow winter deer habitat on Montague Island is distributed on USFS lands. The remaining 35% is located on private lands, with a majority of that located in Unit 37, Patton Bay. Assuming that private land holders will harvest this remaining 35%, then further loss on adjacent USFS lands on south Montague will additionally impact deer populations. Development of the arterial road would further impact deer populations on south Montague. The preferred route of the road occurs immediately along the coast line over about half of its length. This places the road in an area that deer utilize during critical periods of the year, further reducing their available habitat. Additionally, this road placement would make deer more vulnerable to hunters travelling the road, and would possibly increase deer/vehicle collisions. These impacts should be further addressed in the final EIS.

We question the USFS statements in the DEIS on the value of second growth timber to wildlife species. On page 4-32, the DEIS

states that "...mature forest character..." is expected to be reached sooner with pre-commercial thinning operations, and that all wildlife species dependent on mature forests would benefit from these thinning operations. However, the draft goes on to state that the USFS is not certain when the second growth stands would begin to demonstrate the mature forest character essential to the maintenance of these populations. The USFS previously stated (p. 4-31) that deer winter range is not replaced during the life of the standard timber rotation (100 years). Therefore, it is apparently the case that when these timber lands which provide essential wildlife habitat are harvested, they will permanently be lost to wildlife species dependent on that habitat. This scenario would not constitute sound management for species and habitat that are dedicated to a public multiple-use strategy.

The DEIS generally indicates that recreation, including hunting opportunities, would be enhanced by road access. While we agree that the increased access would provide greater numbers of people the opportunity to hunt, the high quality primitive hunting experiences currently enjoyed would be negatively impacted. This position is based on a 1988 deer hunter questionnaire distributed by ADF&G to people who hunted deer in GMU 6 during the 1987 season. The questionnaire was developed in cooperation with and funded in part by the USFS. The questionnaire was designed to provide a variety of information, including data on hunter success and effort, types of transportation, and desired additions to recreation facilities.

Hunt areas 35, 36 and 37 represent the southern end of Montague Island (Attachment III) and encompass the area considered in this DEIS. These 3 areas are very popular for deer hunting and contain the following characteristics:

- hunters experience successful hunts in these areas an average of 52% of the time;
- a minimum of 682 hunter days were reported for these areas, representing almost 24% of the total deer hunting effort reported for GMU 6. Estimated total effort for these areas was calculated at 2362 hunter days;
- reported harvest for these 3 areas was 143 deer, representing almost 18% of the total reported deer harvest in GMU 6. Estimated total harvest from these 3 areas was 499 deer.

Individually, Patton Bay (area 37) was the second most popular hunting area, based on total days hunted, in all of Prince William Sound (PWS). Based on number of deer harvested, it was

the second most successful area and accounted for almost 10% of the total deer harvest in GMU 6.

Deer abundance was the most important characteristic desired by hunters when considering areas to hunt. The presence of clear cuts and road access were, respectively, the next-to-last and last characteristic desired by deer hunters. Clearly, deer hunters in GMU 6 do not want roads and timber harvesting to occur in the areas they hunt.

The questionnaire also provided economic information for deer hunting in GMU 6. During 1987, hunters spent approximately $1.3 million hunting deer in GMU 6.

Brown Bear

There are several contradictory statements in the DEIS regarding the effects of timber harvest on brown bears on south Montague Island. The DEIS states that the short-term effects of timber harvest under all alternatives would likely maintain or improve bear habitat capability (p. 4-40). It also states that removal of security cover along streams on private land will reduce the short-term habitat capability for brown bears (p. 4-40). The relationship of these statements needs to be clarified.

The DEIS also states that only 4% to 16% of the riparian/beach fringe habitat in Units 35, 36 and 37 would be harvested. However, the USFS has no authority over timber harvest or road building practices on private land, which comprise most of Unit 37. Map D indicates that there are 2 major fall bear concentration areas located entirely or partially on private lands; the Beach River drainage, and the Nellie Martin River drainage, respectively. Both of these areas are on private land and have extensive mature commercial timber stands that presumably will be roaded andharvested during the rotation period. The DEIS states on p. 4-40 that large timber harvest on private lands will significantly contribute to the reduction of long-term habitat capability for brown bears in Unit 37. Based on information from southeast Alaska, we believe that the roading and timber harvest proposed for south Montague Island will have long-term significant negative impacts on the brown bear population. Further reductions of brown bear habitat carrying capacity on USFS lands, additive to that on private lands, does not constitute sound habitat management.

The DEIS states that information on brown bear use of clear cut habitats in Prince William Sound is unavailable. This is true. However, we believe that habitats of Montague Island and of Chichagof Island are similar enough to allow comparisons to be made. In our judgement, based on the following studies, the

proposed timber harvest activities will significantly affect brown bear movements and habitat use on Montague Island.

Studies by ADF&G conducted on Admiralty and Chichagof Islands in Southeast Alaska indicate that brown bears are susceptible to disturbance from construction activities and timber harvest (Schoen, J. W. and L. R. Beier 1988). Eleven radioed brown bears were monitored during construction of the Greens Creek mining road. All 11 bears stayed in the vicinity of the construction area, however their movements and activities were modified. All the bears moved away from the construction activity during the day, and then moved back towards the stream at night. The attraction was believed to be the concentrated food source of spawning salmon.

Bears also moved their locations of day-time resting or bedding areas. Prior to road construction, 57 day beds were documented along the stream. After road construction, only 17 day beds were documented, and the proportion of day beds increased on the side of the stream away from the road, indicating that activities and movements along the side of the creek with the road had been modified (Schoen, J. W., L. R. Beier 1988).

Between 1983 and 1986, 866 radio relocations of 27 bears were made on northeast Chichagof Island. Only 20 of these relocations (2%) were in clear cut areas, clearly indicating an avoidance by bears of this habitat.

The proposed arterial road, and subsequent side roads will cause additional negative impacts to the brown bear population from increased vulnerability to hunting and additional human activity (i.e. camps, garbage, etc.). On northeast Chichagof, from 1961-1979 the mean annual brown bear harvest was 5.5 bears. Since 1980, the period when road building and timber harvest began, the mean annual harvest has more than doubled, to 11.8 bears. From 1985-1988 the total harvest was 13, 15, 23 and 19 respectively (Schoen, J. W. 1989). As a result of this increased harvest on a relatively small, isolated population, the Department closed the season by emergency order on September 30, 1988. The Board of Game has since reduced the 1989 season length and placed all brown bear hunting under registration permit.

Management Alternative 5 for south Montague Island is very similar to the situation experienced on Chichagof Island. Brown bear populations on south Montague Island will be severely impacted by roading and increased human use. Management of brown bears will require similar protective measures in the future.

The primary concern for insular habitat management of brown bears is habitat fragmentation. Wide-ranging species, such as bears, may have their habitat components (seasonal food resources,

denning habitat) widely separated in space and/or time, often requiring extensive movements from one area of their range to another. Habitat loss or developments which influence or prevent these movements effectively reduce the species' range and ultimately, the population. The known bear concentration areas along Beach River and Nellie Martin River may be examples of such habitat components that attract bears from a wide area. We, therefore, do not agree with the statement on page 4-40 stating that brown bear habitat capability would likely be maintained through the 100 year rotation.

In our opinion, alternative 5 has the most negative wildlife impacts and ignores public input from the hunter questionnaire regarding their view of desirable hunt area characteristics. The USFS states that by the end of the timber rotation, 82% of the riparian/beach fringe commercial forest land will be harvested. Major wildlife species will likely never attain the levels reached prior to timber harvest assuming a 100-year rotation.

Bald Eagle

The U. S. Fish and Wildlife Service (FWS) has guidelines to protect eagle nesting habitat. These guidelines state that a 100 m radius around nest trees serves as a primary buffer zone with no timber harvest allowed, with an additional 200 m secondary buffer zone. These buffers correspond to areas of 3.2 and 12.7 ha. respectively. A recently completed 5-year study on bald eagle nesting habitat and human disturbance indicates that these guidelines do not adequately protect eagle nests from development related disturbance and habitat destruction (Anthony, R. G., and F. B. Isaacs, 1989). The present management guidelines will ultimately result in small islands of eagle nesting habitat in extensive stands of young even-aged forests. Because the small leave areas are vulnerable to blowdown from severe windstorms, fire, disease and insect infestations, their longevity is limited and carrying capacity is significantly reduced.

We therefore recommend that the primary buffer area surrounding eagle nest-trees be increased to 50-250 ha., depending on topography, stand characteristics and other factors. The 50 ha. area corresponds approximately to a 400 m. radius buffer area. Road building and clear cut logging should not be allowed in this zone. The need for flexibility in selecting the size and shape of each buffer area is important, because surrounding vegetation, topography and eagle behavior influence the requirements.

In late April, the USFWS conducted surveys to identify eagle nest trees on Montague Island. Preliminary information indicates that nest trees in addition to those documented on Map D were located. We recommend that the location of these additional eagle nest trees be incorporated into the mapped data.

Marbled Murrelet

Another species that will be negatively impacted by the proposed old-growth timber harvest activities is the marbled murrelet. This alcid is unique among seabirds because it nests in trees. Nests have been found in old-growth forest stands in Alaska and it is apparent that these stands provide important nesting habitat.

The marbled murrelet population in Prince Willian Sound is estimated at 250,000 birds (Kessel and Gibson 1978) although census data is incomplete. In 1986, the Pacific Seabird Group recognized that the major threats to the population were timber harvest of old-growth stands and oil pollution in concentration areas like the Sound.

An unknown number of marbled murrelets in the Sound have been killed as a result of the oil spill. Additional birds will be killed during the nesting season if oil remains in areas adjacent to nesting areas or feeding concentration areas.

The FWS has recently placed this species in Category II under the Endangered Species Act. This listing indicates that the species may be declining. Such a listing under Category II provides for funding from Section 6 under the Act to collect additional population data. The enclosed March 24 letter (Attachment IV) from the Pacific Seabird Group further explains the problem with the declining marbled murrelet population.

Because of their unique nesting requirements, the unknown mortality to the Prince William Sound population caused by the oil spill, and the newly recognized status of this species by the USFWS, we recommend that the USFS include marbled murrlets as a management indicator species for the Chugach National Forest. We also recommend that the USFS reconsider the proposed alternative because of the negative impacts old-growth timber harvest would have for this species.

Pages 8-9, Fish Habitat Management. We question the exclusion of subsistence fishing from the goal of maintaining and improving fish habitat "to enhance commercial and sportfishing opportunities." At a minimum, the plan should evaluate the possible effects of habitat enhancement on subsistence fishing and on fishery resources used for subsistence purposes.

Page 9, Wildlife Habitat Management. One of the "Analysis Questions" posed here asks, "What opportunities, appropriate to the recreation setting, exist to increase wildlife user days?" We recommend that another question be added to the list: "What might be the effects on subsistence uses of increasing recreational user days?"

Page 36-38, Affected Environment, Subsistence. Minimal attention is given in this section to discussing subsistence uses in the Big Islands Management Area. Attention instead focuses on identifying which study area communities have been designated as rural for purposes of subsistence eligibility, and discussing in very general terms the findings of subsistence studies conducted in these communities. A more informative and desirable presentation would look specifically at subsistence uses of the study area by Cordova, Chenega, and Tatitlek, including the species harvested, modes of access, seasonality and levels of harvest, and related information. At a minimum, the DEIS should identify data gaps and specify how they are being addressed. A discussion as to whether these deficiencies affect the ability of the DEIS to adequately evaluate the possible effects of the proposed actions would be helpful.

Little information is provided on the use of marine mammals by study area communities, and what the effects of the proposed action might be on marine mammal habitat and harvest opportunities. This latter information should appear in the Environmental Consequences section of the final EIS.

None of the references cited in this section appear in the bibliography. This deficiency should be corrected. There is a "Griese and Becker 1988" in the bibliography but not a "Griese and Becker 1987." "Chisum" is the correct spelling of the second author in the "Stratton and Chisum" citations here and elsewhere in the DEIS.

Pages 39-46, Affected Environment, Social and Economic. None of the references cited in this section appear in the bibliography. In the final sentence in the 5th paragraph on page 39, we recommend replacing "frequent" with "extensive."

Chapter 4, pages 113-115, Environmental Consequences, Subsistence. If this section is developed pursuant to ANILCA Section 810, then it should be clearly stated as such. All information necessary to facilitate an assessment of whether the 810 requirements have been met should appear in one place and clearly speak to the 810 requirements.

The potential for subsistence uses being disrupted is not addressed in this section. For example, under Alternative 5 some "re-commercial" timber cutting would occur on the west side of Montague Island, in an area used by the community of Tatitlek and possibly Cordova for deer hunting. Such cutting would severely impact deerhunting in this area for some time. Secondly, Cordova and Tatitlek both use the Zaikov Bay area, where a cabin is proposed. Cordova and Tatitlek will not benefit substantially from this cabin. Instead, it will attract non-rural fly-in hunters, thus increasing competition. These types of impacts

warrant further discussion in this section if their potential impacts on subsistence uses are to be assessed.

In the FINDING section on page 4-115, we believe the first sentence should read ". . .low levels of subsistence use.", instead of "very low levels. . ." At the same time, however, we question whether the information presented in this plan would allow the DEIS to safely quantify the level of use of the areas in question.

Appendix F, pages 54-55, Standards and Guidelines, Subsistence. These guidelines are sufficient for activities proposed on the southern end of Montague Island, but may not be appropriate elsewhere.

Literature Cited

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Attachment I

STEVE COWPER
GOVERNOR

ENCLOSURE (2)

To	HABITAT	INT	DATE
	DIRECTOR		
	DEPUTY DIR	B	
	HAB. BIOL		
	Admin Asst		
	Secretary		
	CTH		
FILE	EXX 2.0		

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

1989

ADMINISTRATIVE ORDER NO. 112

cc: TRAKR

Relating to environmental protection after the Exxon Valdez oil spill.

On March 24, 1989, the Exxon Valdez oil tanker ran aground in Prince William Sound, spilling some 11 million gallons of crude oil into the pristine environment. On March 26, 1989, I declared a Disaster Emergency for the area. It is too early to fully assess the extent of the damage from this spill, but it is clear that cleaning up, assessing the damage and rehabilitating the Sound and other areas of the Gulf of Alaska must be given the highest priority.

To this end, I find that it is in the best interest of the State that all administrative actions relating to natural resource development and protection, and project review, in or near affected areas be carefully coordinated and directed toward full recovery from this disaster.

Specifically, it is critical that all activities involving the use of uplands, tidelands, submerged lands and natural resources be carefully controlled. For these

reasons, I hereby order the Departments of Environmental Conservation, Fish and Game, and Natural Resources to exercise their respective statutory authorities on land and water use, state resource development, environmental protection and other activities, so that cleanup, damage assessment and recovery receive the highest priority. The commissioners of each of these departments shall ensure that each administrative action involving areas affected by the spill, and areas that will substantially contribute to recovery, is consistent with, does not interfere with, or where possible enhances the spill cleanup, damage assessment and environmental recovery.

This order takes effect immediately.

Steve Cowper, Governor

11 May 1989

Date

Attachment III

Approximate boundaries of private land

4

Attachment IV 6096

Pacific Seabird Group

DEDICATED TO THE STUDY AND CONSERVATION OF PACIFIC SEABIRDS AND THEIR ENVIRONMENT

Department of Avian Sciences, University of California, Davis, CA. 95616

March 24, 1989

Mr. Don W. Collinsworth, Commissioner
Alaska Department of Natural Resources
P.O. Box 3-2000
Juneau, Alaska 99802

Dear Mr. Collinsworth:

The Pacific Seabird Group (PSG) strongly urges your agency to take the following steps immediately to protect the Marbled Murrelet:

1. Defer action on land management activites that may impact suitable old-growth habitat until there is sufficient information about the species' habitat requirements. We fully appreciate the drastic nature of this request. However, due to the low and apparently declining population of the species, in our professional judgement, we would be remiss in not calling to your attention the measures needed to prevent further population decline in your area.

2. Implement a survey of the breeding population in Washington following the methods of the California and Oregon survey, as outlined in PSG's handbook "Inventory Methods for the Marbled Murrelet". Continue surveys in California and Oregon.

These recommendations were reviewed by the PSG Executive Council. The Council voted unanimously to urgently call your attention to the serious situation concerning this bird. The concern is due to the research results presented at the workshop on the "Research and Management of Marbled Murrelets" in Portland, Oregon on September 27-28, 1988. A summary of the results of this workshop and a copy of PSG's Marbled Murrelet 1989 Research Priorities are attached for your information.

The information collected so far confirms that Marbled Murrelets may require large trees in old-growth forests for nesting. They are not represented by "Indicator Species" as they are seabirds and not members of any old-growth guild. Please let me know your plans for Marbled Murrelet inventories and research in 1989 and 1990.

Sincerely,

Mike Fry
Chair

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PACIFIC SEABIRD GROUP
RESEARCH GUIDELINES FOR THE MARBLED MURRELET

RESEARCH PRIORITIES FOR 1989

SEPTEMBER 1988

Supplement to, THE PACIFIC SEABIRD GROUP'S RESEARCH GUIDELINES FOR THE MARBLED MURRELET IN CALIFORNIA, OREGON, AND WASHINGTON, August 1988, prepared by the Research Guidelines Committee (S.M. Speich, Research Guidelines Coordinator) of the Marbled Murrelet Technical Group (Lora Leschner, Chair). Derived from the Pacific Seabird Group's Marbled Murrelet meeting n Portland, Oregon, September 1988.

I. Research Priorities.

A. Identify areas of activity. Through the use of forest inventory techniques, identify and quantify areas of Marbled Murrelet activity in the coastal areas of Oregon and Washington, selected areas of British Columbia and Alaska, and areas of California not yet thoroughly surveyed. Determine, as best as possible, the relationships between Marbled Murrelet activities and forest characteristics. For compatibility, surveys should use techniques established during the 1988 field season.

B. Intensive inventory and behavior observations. Return to the areas identified in California and Oregon in 1988 having Marbled Murrelet activity, focus efforts to locate and identify forested areas, by methods now being established, to determine the relationships between areas utilized by Marbled Murrelets and forest characteristics. Quantify the behavior of Marbled Murrelets in these areas and determine the relationships between behavior and identified or likely nesting areas, and use the knowledge to interpret and understand the data derived from the more general and broad scale forest inventory results of 1988 and 1989. There are a small number of identified areas in Washington where these procedures can also be applied.

C. Find Nests. Find and quantify as many nests, nest substrates, and surrounding habitats as possible, in forests throughout Marbled Murrelet range from California to Alaska. Observe and quantify the behavior of Marbled Murrelets at individual nests, and utilize this knowledge to interpret and understand information generated from other activities (i.e. A and B above).

D. Population Size. Conduct marine censuses of the coastal waters of California, Oregon, Washington, British Columbia, and selected areas of Alaska, to determine the relative numbers of Marblod Murrelets in specific regions, during the reproductive period.

E. Genetic Variability. Collect blood samples from all birds caught during 1989 from areas throughout the Marbled Murrelet breeding range to investigate, through analysis of nuclear DNA, the genetic variation between, and possible genetic isolation of, Marbled Murrelet populations.

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THE PACIFIC SEABIRD GROUP'S

WORKSHOP ON THE RESEARCH AND MANAGEMENT OF MARBLED MURRELETS
SEPTEMBER 27-28, 1988
PORTLAND, OREGON
SUMMARY AND CONCLUSIONS

More than 60 researchers, agency personnel, and others attended various sessions of the workshop on research and mangement of Marbled Murrelets. During the course of reports from Alaska, British Columbia, Washington, Oregon, and California, several points became clear.

PRESENT POPULATION STATUS. The population of Marbled Murrelet while high in Alaska and probably British Columbia, is quite low south of Puget Sound, and apparently has declined markedly over the past 50-100 years. The survey conducted in California in 1988 showed two population centers, one in Humboldt and Del Norte counties, and the other in San Mateo and Santa Cruz counties. A 300 mile gap exists between these populations where old-growth forests have virtually been eliminated. Most of the population in California is contained in state and national parks. However, researchers did locate a few small populations on private timber lands. North of these areas, current information strongly suggests that populations are scattered in low numbers, quite probably due to the highly fragmented nature of coastal old-growth forests between the California border and Canada.

SUITABLE HABITAT. Current research indicates that the species is exclusively associated with mature and old-growth forests within 30 miles of the coast. This corresponds to observations made over the past few years in California and Oregon that Marbled Murrelets occur primarily offshore of old-growth forests. The acreage required for nesting is not known. Site characteristics such as aspect, slope, and possible travel coorridors are unknown.

INDICATOR SPECIES. There is no information that the indicator species concept applies to this unique seabird. All of the requirements of the Marbled Murrelet cannot be met in the forest as it must return to the sea. Thus, they cannot be an indicator species by definition, and they may not be protected like species whose needs are satisfied by the indicator species concept. The Marbled Murrelet may be similar to other alcids and thus traditional in nest site location. It may be difficult for the species to relocate in remaining suitable habitat, especially if the remaining habitat is even farther from saltwater. Land managment agencies should include the Marbled Murrelet in the assessment of projects in coastal forests.

STATUS. All available information indicates a species in low and declining numbers. National Audubon Society has petitioned USFWS to list the Washington, Oregon, and California sub-populations as endangered. The U.S. Forest Service and other land management agencies should consider the species as sensitive and forest planning efforts should address the nesting habitat requirements. The principal factors affecting population abundance may be under the control of land management agencies.