



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

**Department of Fish and Game**

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June 14, 2018

Delilah Brigham  
POW LLA Project Leader  
P.O. Box 19001  
Thorne Bay, Alaska 99919

RE: Prince of Wales Landscape Level Analysis  
Draft Environmental Impact Statement

Dear Ms. Brigham:

The Alaska Department of Fish & Game (ADF&G) has reviewed the U.S. Forest Services (USFS) Draft Environmental Impact Statement (DEIS) for the Prince of Wales Landscape Level Analysis Project (POW LLA) on the Thorne Bay and Craig Ranger Districts; on Prince of Wales and surrounding islands.

The purpose of the POW LLA is to improve forest ecosystem health on Craig and Thorne Bay Ranger Districts, help support community resiliency and provide economic development. Our comments on the DEIS are as follows:

**Fisheries**

Fish Stream Crossing Structures

The issue of red pipes has been ongoing for many years. Efforts have been, and are being, made to prioritize red pipes on Prince of Wales Island. According to USFS data, hundreds of miles of fish habitat are currently blocked by fish passage structures which do not provide efficient fish passage. Replacing or removing all deficient stream crossing structures blocking fish passage should be a priority for all existing roads included in the POW LLA. For any new road construction, crossing structures must be designed to provide efficient fish passage.

Fish Habitat Improvements

Alternatives 2 and 5 propose fish habitat improvement methods such as lake fertilization (2&5) and egg incubation boxes (2). Egg incubation boxes are not a form of fish habitat improvement but are a method of propagation. The consideration of egg incubation boxes as a fish habitat improvement method should

be deleted from Alternative 2. Lake fertilization, although a potential activity that could boost the food chain in a natural system requires extensive scientific research and monitoring to determine if 1) the process will have any benefits to the system and 2) if the process will have any negative impacts to the existing fish and fish habitat.

#### USDA Forest Service Agreement 14-MU-11100100-015

All projects requiring work below the ordinary high water of all fish-bearing streams would require concurrence under the Memorandum of Understanding Between ADF&G Habitat Division and the USDA, Forest Service, Alaska Region.

### **Wildlife**

Although old-growth associated or dependent species such as American martens, Queen Charlotte goshawks, and Prince of Wales flying squirrels will be negatively affected by additional harvest of old-growth forest, long-term effects on Sitka black-tailed deer and Alexander Archipelago wolves are of greatest concern to ADF&G.

Deer are the most popular big game species in Southeast Alaska, an important and highly valued food resource for residents of GMU 2, and the primary prey of wolves. Since 2016 local hunters have complained about difficulty finding sufficient deer to harvest and in April 2018 the Federal Subsistence Board voted to reduce non-federally qualified deer hunter bag limit from four bucks to two bucks. Recent winters have been mild, and many hunters attribute their difficulty harvesting deer to predation by wolves and the low numbers of deer supported by extensive stands of young-growth forest adjacent to much of the Prince of Wales Island road system.

The Alexander Archipelago wolf has twice been petitioned for listing under the Endangered Species Act (ESA). Although both petitions were found not warranted and the wolf population has rebounded from a recent low estimated at 89 animals, future ESA petitions seem likely. Because forest management decisions have irreversible and long-term consequences for wolves and their primary prey, those decisions should anticipate future ESA listing petitions. Deer are the primary prey of wolves, and a high proportion of GMU 2 residents rely on deer as a food source. Consequently, many local residents view wolves as competition for deer and argue for reducing the population to very low numbers. To be viewed as successful, forest management in the POW LLA area will need to manage for habitat capable of supporting a robust deer population that provides for human harvest, particularly deer accessible to road-based hunters, and can sustain a harvestable wolf population.

Our comments are separated by the themes of deer and wolf habitat; however, the two are related because supporting actions to conserve the quality and extent of deer habitat would be beneficial to maintaining a sustainably harvestable wolf population and deer hunter satisfaction.



### Deer Habitat

To maintain and enhance deer habitat, we support minimizing old-growth harvest and maximizing the proportion of young-growth in the total timber harvest. Thinning or other young growth treatments such as patch cuts should occur before 25 years post-harvest and should be designed to delay stem exclusion to the maximum extent possible and to enhance deer forage generation. Maintaining forage production in young growth stands likely has little benefit if slash discourages deer from using treated stands. Any treatment of young growth intended to benefit deer should carefully consider slash treatments and the need to facilitate movement of deer within and among favorable habitat patches.

Research on both deer and wolf habitat selection indicated that regenerating clearcuts (<25 years post cut) are selected seasonally, but selection is dependent on winter snow depth. Gilbert et al. (2017) demonstrated that deer selected regenerating clearcuts but avoided older closed canopy second-growth (>25 years post cut) and high-volume old growth during low snow winters. However, during deep snow winters, deer avoided regenerating clearcuts and preferred old-growth forests. These results emphasize the importance of maintaining old growth stands throughout the POW LLA area as critical winter deer habitat. Higher volume productive old-growth forest below 800 feet elevation on south facing slopes should be preserved.

Similarly, wolves in GMU 2 selected regenerating clearcuts during fall and winter in addition to low-volume old-growth forests. Regenerating clearcuts (<25 years post cut) were avoided during denning season and summer. Wolves consistently avoided both thinned and unthinned second-growth forest (>25 years post cut) throughout the year, suggesting that the value of regenerating clearcuts as wolf habitat is short-lived. Importantly, closed canopy second-growth forest has little value for wolves, and the thinning treatments applied to date in the POW LLA area do not appear to have been effective at enhancing deer or wolf habitat. Improved young-growth treatments are needed and should occur early and often to extend the period of favorable conditions for both deer and wolves.

### Wolf Habitat

#### Dens:

ADF&G research supports the following recommendations of the Interagency Wolf Technical Committee that are included in alternatives 3 and 5:

Protect the integrity of known wolf dens (active and inactive) with noncircular buffers generally centered around the den in consultation with ADF&G and the United States Fish and Wildlife Service (USFWS).

- Retain roadless, gently sloping ( $\leq 25$  percent) productive old-growth forest within 330 feet of major lakes and streams (defined in Wolf Technical Committee Report) to preserve denning habitat and den-site options for wolves.
- Apply a no disturbance buffer of 2,400 feet in radius (about 0.5 mile) around reproductive wolves at den sites as suggested in Preliminary Wolf Buffer Analysis (ADF&G 18 Oct. 2017).



Specifically, our research (Roffler et al. 2018) indicates that wolves select low-volume old-growth forest and open vegetation habitat types (e.g., meadows, grasslands, and muskegs) at low elevation and relatively flat terrain. During denning season, wolves avoided areas of relatively higher road densities ( $> 0.772 \text{ km/km}^2$ ). These results underscore the importance of old-growth forests in areas of low human disturbance for wolf denning habitat.

Our current and previous research (Person and Russell 2009) also support the recommendation of the Interagency Wolf Technical Committee to protect habitat surrounding all documented wolf dens in perpetuity. We found many dens used during 2012–2016 had also been used during 1995–2003. Additionally, we found that wolves used the same den (or a den nearby, e.g.,  $\sim 100 \text{ m}$ ) for multiple sequential years. These results suggest that dens have long-term value for wolf reproductive activities and should be protected so they remain attractive to wolves.

We support excluding any type of development activity within a 0.5 mile-radius of known dens but emphasize that this distance should be considered the minimum necessary. Disturbance buffers of 1 – 6 miles radius have been recommended to reduce disturbance surrounding wolf den sites in British Columbia and the Canadian and U.S. Rocky Mountains (Chapman 1977, Matteson 1993, Fritts et al. 1994, Paquet and Darimont 2002). Those recommendations were derived from observations of wolf behavior and habitat characteristics of den sites. To remain viable as places to successfully raise pups, denning wolves require access to sufficient prey in proximity to the den. During denning season members of reproductive packs foraged on average within 6.8 miles of the den (Roffler and Gregovich, in prep.). Disturbance and foraging buffer protections should be extended whenever possible and designed to maximize inclusion of the greatest quantity of high-quality deer habitat (e.g., old-growth forest).

The DEIS alternatives recommend closing some roads to benefit wolves. Closing specific roads could minimize the potential for disturbance around dens and would limit access for wolf hunters and trappers. However, collared wolves in GMU 2 demonstrated a seasonally flexible response to roads by avoiding areas with a high density of road during the denning season and selecting areas with higher road densities during fall and winter (Roffler et al. 2018).

**Young Growth Treatments** – Although young growth treatments have been shown to reduce the decline in deer forage availability resulting from post-clearcut forest succession (Alaback 2010, Cole et al. 2010, Suring 2010, Hanley et al. 2013), population-level benefits or improvements to deer vital rates resulting from young growth treatments remain poorly documented and are likely nullified by deep snow. Farmer et al. (2006) also found that deer using young clearcuts during low snow periods had an increased risk of predation by wolves and that young deer using thinned stands suffered an increased incidence of mortality due to malnutrition. Considering the importance of deer to hunters and to supporting a sustainably harvestable wolf population and that the effects of clearcutting old-growth



forest on forage availability for deer are essentially irreversible, we encourage using very conservative assumptions about the density of deer supported by treated or untreated young-growth forest.

**Managing Deer Harvest by WAA** – The DEIS suggests that in WAAs where deer harvest exceeds 10 percent of deer habitat capability season length or bag limit may be reduced. Managing deer at the scales smaller than GMUs or subunits is usually impractical. In most cases, estimates of harvest at the scale of a WAA are also unreliable.

**Dispersal of Animals from Harvested Stands** – The DEIS contends that animals with greater dispersal capabilities, including migratory deer, will be less effected by timber harvest compared to those with lower dispersal capabilities. That contention is not supported by the literature and is flawed because it assumes there is suitable unoccupied habitat into which animals displaced by timber harvest can disperse. Other parts of the DEIS assume deer are at carrying capacity. Further, ADF&G research has found that deer in GMU 2 and GMU 4 have high site fidelity, low dispersal rates, and rarely disperse beyond the watershed in which they were born (Colson et al. 2013, Schoen and Kirchhoff 1984). Working on Hecate Island Farmer (2002) found that does and fawns did not disperse in response to timber harvest.

**Deer Hunter Satisfaction** – The DEIS recognizes that deer are a very important food resource to local residents and that one likely effect of timber harvest is increasing competition among hunters for deer in declining suitable and huntable habitat. A high proportion of GMU 2 deer hunters access hunting opportunity using the Prince of Wales Island road system. Consequently, many residents and users of the POW LLA area will judge the success of forest management by the number of deer they are able to harvest within walking distance of roads. The DEIS maintains that the proposed additional harvest of old-growth forest will only reduce the HCI for deer in one biogeographic province by five percent. We cannot judge if that is the case but recommend that the Final EIS include a detailed discussion of measures to maintain and improve deer habitat and hunting opportunity adjacent to the road system. Ideally that discussion would include a comparison of the long-term and widespread economic benefits of deer hunting to the short-term and often narrowly-focused economic benefits of timber harvest.

### **Alaska National Interest Conservation Act (ANILCA)**

#### **Consideration of activities in Wilderness**

We are concerned that the DEIS precludes consideration of activities in wilderness solely because of bureaucratic procedures, despite allowances for those activities under ANILCA. The potential activities identified by the POW LLA Team and/or the public within wilderness include a three-sided shelter within the South Prince of Wales Wilderness; development, improvement, and/or enhancement of maintenance to the Karta Cabin and trail; and various fish habitat improvement projects in the Karta River Wilderness and the South Prince of Wales Wilderness. The DEIS states, “These proposals were



not included in the DEIS because the authority to make these decisions is reserved to the Chief of the Forest Service or the Regional Forester and because they require additional procedures beyond those required by the National Environmental Policy Act. They may be analyzed in the future as separate projects” (p. 22).

ANILCA Section 1315(c) and (d) allow for maintenance of existing cabins and construction of new cabins in wilderness, and ANILCA Section 1315(b) allows for fishery research, management, enhancement, and rehabilitation activities in national forest wilderness. The purpose of additional procedures such as Minimum Requirements Analysis and the activity-specific considerations in the Alaska Region Supplement to FSM chapter 2320 (R-10 2300-2008-2) is to protect wilderness character while administering the area and allowing for legislatively authorized uses such as those in ANILCA, not to prevent consideration of activities altogether. Also, according to the Alaska Region Supplement to FSM chapter 2320, the Forest Supervisor—not the Chief or Regional Forester—has the authority to approve temporary facilities needed in connection with fisheries research, management, or enhancement/rehabilitation projects. We request the POW LLA consider activities in wilderness as needed and amend the decision trees in Appendix B as to include wilderness considerations accordingly.

#### Winter Sports Access Area adjacent to Karta River Wilderness

The Effects Analysis for the action alternatives is written as if snowmachine use is not allowed in wilderness, but snowmachine use for traditional activities is allowed under ANILCA Section 1110(a). We request the language on pages 258-259 about “snowmobile incursions” and “signage, and increased patrol of the boundary” be deleted, and ANILCA’s allowance for snowmachines in wilderness be acknowledged.

#### Activity Cards—Wilderness

The Appendix A Activity Cards as written may unnecessarily limit opportunities for public access to wilderness. The Activity Cards’ Resource Specific Guidelines for Wilderness contain boilerplate language about the need for a Minimum Requirements Analysis (MRA) but lack the more specific direction in ANILCA, FSM 2300, the Alaska Region Supplement to FSM chapter 2320 (R-10 2300-2008-2), or the Forest Service Wilderness Stewardship Desk Guide regarding the activities. Because of their sole focus on the MRA, the Guidelines imply that the activity must be necessary to “protect or restore the wilderness resource,” yet the Forest Service guidance for some activities is aimed at furthering the recreational purpose of wilderness per the Wilderness Act rather than simply protecting or restoring the wilderness resource, and ANILCA has other specific allowances in wilderness. We recommend providing context for the MRA boilerplate language and briefly describing the specific Forest Service guidance for the following activities:

- Card 25 Stream Crossing Structures: Reference the four conditions under which bridges are allowed under FSM 2323.13f (i.e. no other crossing reasonably available, safety, prevent bank damage, frequent floods).



- Card 38 Trails: State that trails are an acceptable improvement in wilderness per FSM 2323.13f. Reference the trail standards for wilderness and the importance of trails for visitor use of wilderness as described in the Forest Service Wilderness Stewardship Desk Guide (p. 82).
- Card 40 Access Points for Kayak and Canoe Launches: State that trails are an acceptable improvement in wilderness per FSM 2323.13f. Reference the trail standards for wilderness and the importance of trails for visitor use of wilderness as described in the Forest Service Wilderness Stewardship Desk Guide (p. 82).
- Card 45 Cabins and Three-sided Shelters (Recreation Structures): Reference the requirements of ANILCA and the Alaska Region Supplement to FSM chapter 2320 (R-10 2300-2008-2, 2323.13b):
  - Section 1315(d) of ANILCA provides that a limited number of new public use cabins and shelters may be built and maintained in wilderness where necessary for public health and safety.
  - Decisions to build new cabins or shelters will be made through the NEPA process.
  - A health and safety analysis is required.
  - Congressional notification is required.
- Card 46 Cabin Decommissioning: Reference the requirements of ANILCA and the Alaska Region Supplement to FSM chapter 2320 (R-10 2300-2008-2, 2323.13b):
  - Decisions to remove existing cabins or shelters will be made through the NEPA process.
  - A health and safety analysis is required.
  - Congressional notification is required.

#### Sustainable Recreation Management Map

The Karta River cabin is either missing from the map or covered by a different symbol.

#### **Evaluation of Alternatives**

Alternative 1 – This is the no action alternative. Because it does not involve additional harvest of old-growth forest, it would have no effect on wildlife populations compared to existing conditions. Stream restoration and fish passage improvement projects have been ongoing for many years. It is assumed, under the no action alternative, that these types of projects would continue to occur on a project by project basis due to the need to provide for fish passage and to improve habitat conditions previously impacted by timber harvest.

Alternative 2 – This is the proposed action. This alternative envisions the highest level of old growth harvest, nearly double that of Alternative 3 and four times that of Alternative 5. Consequently, it will result in the greatest loss of productive wildlife habitat and have the greatest effect on populations that depend on that habitat. Considering that significant additional old-growth harvest is anticipated on non-federal lands in the POW LLA area and that the full cumulative effects of that old growth harvest on

wildlife populations and wildlife users will not be realized for several more decades, ADF&G encourages a more conservative approach.

Alternative 3 – This alternative proposes logging about half the old growth as Alternative 2 and about 75% of that old growth would be in partial harvest units using helicopter yarding. This alternative also includes selected recommendations of the Interagency Wolf Technical Committee to conserve wolf and deer populations. This alternative would result in less loss of old growth wildlife habitat than Alternative 2. Because of the high reliance on helicopter yarding in remote sites, it would also have the least effect of all action alternatives on deer habitat along the road system.

Alternative 5 – This is the action alternative with the least effect on old growth-associated wildlife and users of that wildlife. It allows about half the old growth harvest of Alternative 3. However, compared to Alternative 3 about 1,000 more acres of that harvest would be by clearcut along roads, rather than partial harvest with helicopter yarding. It also incorporates all recommendations of the Interagency Wolf Technical Committee. Of the action alternatives considered ADF&G believes Alternative 5 would have the fewest detrimental effects on old growth-associated wildlife populations and users of those populations.

#### **General Comments**

ADF&G believes that the POW LLA should be just that, an analysis of the resources on Prince of Wales and surrounding islands, and not an implementation project. This broad landscape assessment should be a non-decision-making part of a step-by-step process which could result in individual Forest Plan implementation projects as required under NEPA.

Sincerely,



Mark Minnillo

Email Cc: Al Ott, ADF&G, Fairbanks  
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Ms. Delilah Brigham

June 14, 2018

Erin Knoll, USFWS, Anchorage



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