Data Submitted (UTC 11): 10/14/2020 8:00:00 AM
First name: Sylvia
Last name: Kreel
Organization: Alaska Dept. of Natural Resources
Title: Large Project Coordinator
Comments: Re: Twin Mountain II timber Sale

Dear Mr. Stewart,

Thank you for the opportunity to provide scoping comments on the proposed Twin Mountain II Timber Sale. Per the Notice of Intent published in the September 14, 2020 Federal Register, this project would offer for harvest about 42 million board feet of old growth timber from approximately 3,000 acres in the Staney and Red Bay areas within the Thorne Bay Ranger District. Additionally, this project would include road construction, reconstruction, maintenance, and decommissioning.

I have coordinated with the Alaska Departments of Fish and Game (ADF&G), Environmental Conservation (DEC) and Natural Resources (DNR) to review the Notice of Intent and offer the following scoping comments on behalf of the State of Alaska.

Wildlife Management Context

The project area is located on Prince of Wales Island which is within Game Management Unit (GMU) 2.

Although old-growth associated or dependent species such as American martens (Martes americana), Queen Charlotte goshawks (Accipiter gentilis laingi), and Prince of Wales flying squirrels (Glaucomys sabrinus griseifrons) may be negatively affected by additional harvest of old-growth forest, long-term effects on Sitka black-tailed deer (Odocoileus hemionus sitkensis), Alexander Archipelago wolves (Canis lupus ligoni), and black bear (Ursus americana) are detailed below. Person and Brinkman (2013) provide a comprehensive summary of the science-based effects of clearcut logging old-growth forest on deer and wolves. ADF&G, Division of Wildlife Conservation (DWC) comments are separated by themes of deer, wolf, and habitat; however, the three are intrinsically linked because supporting actions to conserve the quality and extent of deer habitat would benefit sustainably harvestable predator populations and deer hunter satisfaction.

Comments and Recommendations

Deer Habitat

Deer are the most popular big game species in Southeast Alaska, an important and highly valued subsistence resource for residents of GMU 2, and the primary prey of wolves. Since 2016 local hunters (i.e. federally qualified hunters) have expressed difficulty finding sufficient deer to harvest and in April 2018 the Federal Subsistence Board voted to reduce the non-federally qualified deer hunter bag limit from four bucks to two bucks. Recent winters were 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. While data on GMU 2 deer population dynamics are limited, researchers estimate deer populations will decline due to current and previous forest management practices (Person and Brinkman 2013, The Nature Conservancy 2014). Deer populations in GMU 2 are predicted to decline by 21-33% over the next 30 years, due to various road, timber harvest, and winter severity scenarios (Gilbert et al. 2015).

To maintain and enhance deer habitat, the DWC supports minimizing old-growth harvest and maximizing the proportion of young-growth in the total timber harvest. Vertical leave strips that contain existing migration and movement corridors, key terrain features, and habitat connectivity should be implemented to provide deer

elevational movements (Wolf Technical Committee 2017). Vertical leave strips are necessary for deer movement, particularly between summer and winter ranges. 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 is left in the field and 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 Twin Mountain II Timber Sale project area as critical winter deer habitat. Higher volume productive old-growth forest below 800 feet elevation on south facing slopes should be preserved especially in areas like the Twin Mountain II Timber Sale where previous harvest has been extensive.

Deer Habitat Summary:

* Minimize old-growth harvest and maximize young growth harvest.
* Preserve natural vertical leave strips.
* Implement young-growth treatments within 25 years post-cutting and remove slash.
* Protect productive old-growth below 800 feet elevation on south facing slopes.

Wolf Habitat

Maintaining sustainable wolf populations in GMU 2 is paramount. The Alexander Archipelago wolf has been petitioned for listing under the Endangered Species Act (ESA) three times, most recently in 2020. Although the first two petitions were found not warranted, a current ESA petition is ongoing. The petition lists one of the primary threats to wolf habitat as continued logging of old-growth forest and associated road building (Wolf et al. 2020).

Wolves select regenerating clearcuts during fall and winter in addition to low-volume old-growth forests (Gilbert et al. 2017). Regenerating clearcuts (<25 years post cut) were avoided during wolf denning season and summer. Wolves consistently avoided 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. Improved young-growth treatments are needed and should occur early and often to extend the period of favorable conditions for both deer and wolves. DWC research (Roffler et al. 2018) indicated 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 km/km2). These results underscore the importance of old-growth forests in areas of low human disturbance for wolf denning habitat.

DWC current and previous research (Person and Russell 2009) support the recommendation of the Interagency Wolf Technical Committee (2017) to protect habitat surrounding all documented wolf dens in perpetuity. DWC found that wolves used the same den (or a den nearby, e.g., ~100 m) for multiple sequential years which indicates that dens have long-term value for wolf reproductive activities and should be protected so they remain attractive to wolves. There are no known active den sites in the proposed area. If wolf dens are found during the planning period or timber harvest, DWC recommends excluding all development activity within a 0.5 mile-radius of dens but emphasize that this distance should be considered the minimum necessary (Roffler and Gregovich 2018). Non-circular buffers around discovered dens are ideal. Disturbance buffers of 1 [ndash] 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 1992, Fritts et al. 1994, Paquet and Darimont 2002). 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 2018). 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) and should retain roadless, gently sloping (<25 percent) productive old-growth forest within 330 feet of major lakes and streams (defined in Wolf Technical Committee 2017) to preserve denning habitat and den-site options for wolves. Finally, closing specific roads could minimize the potential for disturbance around dens and would limit access for wolf hunters and trappers (Roffler et al. 2018).

Wolf Den Summary:

* Protect the integrity of known wolf dens (active and inactive) with noncircular buffers generally centered around the den in consultation with DWC and the United States Fish and Wildlife Service (USFWS).
* Use a mean no disturbance buffer of 0.5 mile around reproductive wolves at den sites as suggested in Preliminary Wolf Buffer Analysis.
* Preserve productive old-growth forest within 330 feet of fresh water sources (e.g. lakes and streams).

Black Bear Habitat:

The DWC is unaware of active bear dens in the current proposed project area. However, the proposed timber harvest is quality black bear denning habitat. DWC research shows black bears select woody structures (both live and dead) with average diameters of 4.5 feet (1.38 meters) in habitat classified as commercial forest lands (Porter et al. 2020). If black bear dens are located within timber sale units, DWC recommends creating 100 foot buffers for no activity around the den site.

Black Bear Den Summary:

* Provide a 100 foot no activity buffer around black bear den sites.

Again, thank you for the opportunity to comment. The State of Alaska intents to engage in the review of the project throughout the environmental review processes and I look forward to the release of the Draft Environmental Impact Statement (DEIS). DNR, Office of Project Management and Permitting will coordinate with other state agencies and provide comments on the DEIS on behalf of the State of Alaska.