**U. S. Department of Agriculture, Forest Service. (2014a). 7.0 Multiple use and ecosystem services. In Nez Perce–Clearwater National Forests: Forest plan assessment (pp. 7-1 to 7-137). Boise, ID: U.S. Department of Agriculture, Forest Service, Nez Perce-Clearwater National Forests**

**The following comments address the above document referenced in the DEIS:**

Logging also contributed to diversifying what was historically a predominately forested landscape, creating large areas of early seral habitat rich with browse. Elk flourished with the higher quantity and quality of habitat available. In north central Idaho, elk populations peaked in the 1950s. Elk herds declined, however, through the latter part of that decade and the 1960s and 1970s, partially due to maturation of brush-fields and declines in forage availability, logging and road-building activity that increased vulnerability of elk to hunters, and loss of some major winter ranges. As the newly created early- to mid-seral habitats aged and succession continued to move toward a climax condition, habitat potential declined and elk populations declined in response. To counter that drop, the Idaho Department of Fish and Game (IDFG) replaced an either-sex hunting regime with an antlered-only general hunting season in 1976. Elk herds then began rebuilding in response to revised harvest management and continued to rebuild until the late 1980s or early 1990s, when herds again began to decline in response to increasing loss of early seral habitat.

 IDFG’s Elk Management Plan has identified six primary habitat issues affecting elk: invasive plants, wildland fires, timber and rangeland management, ecological succession, human development, and energy development. **Note: no mention of roads or security areas**

**Fire**

Wildfire is a major ecological force that helps maintain historical plant communities. Today, few factors play as critical a role in elk habitat condition and health as wildfire. **Please explain why neither forest has addressed this issue during the past 50 years!**

Timber harvest has the best potential to benefit elk when few new roads are built or roads are closed once harvest is complete, adequate security cover is preserved, and the size of the openings are considered (Lyon and Christensen 2002). **Another management option the forest has failed to utilize!**

The body condition of elk in the autumn is dependent on the quality of summer habitat and not on the body condition of the individual in the prior spring (Cook 2011). **Has this been identified as an issue forest-wide??**

Winter is typically the most crucial season affecting elk survival. Elk winter in areas that provide access to shrub and grass forage capable of sustaining individual survival and herd reproductive fitness through the winter (Citation from EMP). **With the exception of the Salmon River breaks, grasses are a very minimal part of an elk winter diet on the forest. Elk that winter on grass ranges historically have better cow:calf ratios.**

A relatively small difference in forage quality consumed by elk in summer and autumn can have strong effects on fat accretion, timing of conception, probability of pregnancy of lactating cows, calf growth, yearling growth, and yearling pregnancy rates. Forest management focus is on maintaining the ability of the habitat to meet elk needs for forage, water, security, or space, as well as protecting special features like licks and wallows. **Please provide documentation the timing of conception, pregnancy rates, calf and yearling growth are an issue on the Forest. Also, the percentage of yearling pregnancy’s is normally less than 10%; IMO, improving nutrition will not show a significant increase.**

In Forest Plan revisions, habitat effectiveness should be used as an indicator of ability and distribution of quality habitats to support elk (Christensen et al. 1993). Habitat effectiveness addresses the ability of habitat to meet elk needs for growth and welfare (Lyon and Christensen 1992). **When and who computed elk habitat effectiveness recently??** The most notable forest management practices that influence habitat effectiveness are motorized access, availability and distribution of quality forage, the extent and connectivity of cover, and spatial relationships with intermingled ownerships. **The availability and distribution of quality forge is in the toilet and in the key elk habitats, intermingled ownership not really a problem. Nor is ‘human developments’ in the key habitats.**

Behavioral responses of elk to human disturbance include greater use of cover (Irwin and Peek 1983), increased movements (Cole et al. 1997), and avoidance of roads (Rowland et al. 2000). Human disturbance is likely to be most detrimental if it is frequent and unpredictable (Knight and Gutzwiller 1995). **When there were elk in the Lochsa drainage, many people enjoyed driving up highway 12 to look at elk during the winter. That been a foregone pastime the past 22 years.**

By reducing energy expenditures, elk can increase fat reserves, survival rates, and productivity (Cole et al. 1997). **Again, has this been identified as an issue on the forest? What is proposed to reduce energy expenditures?**

Those new roads allowed more hunters to access elk habitat. Concurrent declines observed in bull:cow ratios in many elk herds led to concerns and research regarding the effects of access and roads on elk vulnerability and habitat security. Wildlife managers have identified elk habitat security and vulnerability as important issues. **In the 10 years following the initiation of bull-only hunting in GMU 12, the number of bulls in trend increased +220 (190%) and the bull:cow ration went from 32:11 to 27:100; cows increased +957 (126%); calves increased +650 (333%), and the calf:cow ratio changed from 20:100 to 39:100.**

Motorized access into elk habitat, which was previously an issue with hunters during the fall season, now occurs year-round and presents a host of new issues. Modern OHVs allow recreationists access to elk habitats that were once secure. And use of motorized roads and trails is no longer limited primarily to hunting seasons, but now occurs year-round. **Very broad statement, what portion of the forest is this an issue during the winter?**

Many trails originally used for stock and hiking are now accessible to motorized users**. And who has allowed this to happen?? IMO, pioneering new trails/roads is the issue.**

Habitat adjacent to roads and trails that are open to motorized travel is avoided by elk; and motorized disturbance increases daily movements by elk. **Again, another all-encompassing statement, that doesn’t apply to elk habitat forest-wide. Not all roads impact equally.**

Although the impacts are often similar, the effects of motorized disturbance on elk can be divided into two general categories: vulnerability to harvest and hunting pressure, and disturbance or displacement from preferred habitat.

Increased motorized access and vulnerability affects elk population structure. Leptich and Zager (1991) documented higher bull mortality rates (62% mortality) in highly roaded areas in Idaho compared to areas with few roads (31% mortality. **How much of the Nez-Clear have the same conditions that occurred in their study area? This study was conducted in comparatively heavily roaded and logged habitats.**

Batcheler (1968) likewise noted declines in productivity of red deer related to hunting pressure. Squibb et al. (1986) documented that heavy hunting pressure delayed conception dates of elk. **Move the season out of the rut!!**

The Clearwater National Forest ranked first in estimated ATV participation, accounting for approximately 20% of total recreation visits to the Forest. In addition to increased numbers, ATVs have capabilities that allow access to remote landscapes. **Who controls access, And has it been documented as a problem on the forest?**

The cumulative effects of predation and reduced access to quality foraging habitats are believed by biologists to be the most significant contributing factors retarding recovery of struggling elk population over much of the National Forest managed landscape. **This has been known for 40-50 years!! IDFG is addressing the predation issue, what has the USFS done to restore quality foraging habitats during this time?**

The energetic cost of moving away from disturbance associated with roads and trails may be substantial (Cole et al. 1997) and could limit population productivity or reduce an elk’s ability to withstand winter by depleting fat reserves (Cook et al. 2004). The displacement of elk away from roads and trails may cause substantial reductions in habitat utilization. Population level impacts could occur if elk are forced into marginal habitats to avoid disturbance**. Have any of the above issues been documented as a significant issue on the forest?**

Kuck et al. (1985) also reported that cow elk and their calves readily abandoned traditional calf-rearing areas when faced with repeated human disturbance. Cow/calf pairs experiencing disturbance treatments moved more frequently, used larger areas, and reduced selection of normally preferred habitats. **Mining activity in much different situation than on the Nez-Clear forest!**

**The degree of impact to elk from habitat displacement varies with location, hunting pressure, and relative importance of habitats into which motorized access and human disturbance intrudes.** Studies indicate that elk respond less to constant non-stopping vehicle traffic than to slow vehicle traffic that stops periodically (Ward 1976, Leege 1984). **This is why broad sweeping statements can’t be applied to a forest with the diversity the Nez-Clear has!**