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Title:
Comments: Nez Perce-Clearwater Draft Forest Plan Comments

Attached are my comments to the Draft Environmental Statement, the Draft Forest Plan, plus the U.S Department of Agriculture, Forest Service. (2014a). 7.0 Multiple use and ecosystems 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, that was cited in the DEIS. Please do not hesitate to contact me if you wish to discuss my comments,

A separate cover letter will be sent to Forest Supervisor Probert.

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Regards,

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ATTACHMENT BELOW
Goals for WildlifeFW-GL-WL-01. Through cooperation and collaboration with the U. S. Fish and Wildlife Service, other federal agencies, state agencies, and tribes on conservation strategies, recovery plans, and habitat management, ecological conditions on National Forest System lands contribute towards recovery of federally listed threatened or endangered species, candidate, and proposed species are conserved and future listings are prevented.Desired Conditions for WildlifeFW-DC-WL-01. The Nez Perce-Clearwater provides habitat conditions for federally listed threatened, endangered, and candidate plant and animal species that contribute to their recovery to the point at which listing is no longer appropriate. Habitat used by federally listed species provide conditions to meet their life history needs.FW-DC-WL-02. Ecological conditions in the Nez Perce-Clearwater planning area provide for, or contribute, to the persistence of populations of species of conservation concern over the long-term with sufficient distribution to be resilient and adaptable to stressors and likely future environments.FW-DC-WL-03. The arrangement of vegetation patches ranges widely in size, shape, and structure to provide connectivity for wildlife. Patches are juxtaposed across the landscape, forming a landscape pattern consistent with natural range of variation. These patterns vary by habitat type group, slope, aspect, and topographic position. Species are able to move freely across and between habitats, allowing for dispersal, migration genetic interaction, and species recruitment.FW-DC-WL-04. The Nez Perce-Clearwater provides the ecological conditions for the long-term persistence of fisher, whose habitat generally follows the distribution of the warm moist potential vegetation type, although fishers sometimes use other potential vegetation types. Fisher

habitat is composed of large patches of tall forest with trees greater than or equal to 25 meters tall arranged in complex, highly connected patterns at the 20-40 square mile landscape scale. Patches of tall forest cover an extent of approximately 50 percent across the warm moist potential vegetation type group forestwide consistent with the desired conditions found in Table 6 in the warm moist potential vegetation type section. At the eight square mile home range scale, fishers benefit from variety in successional stages resulting from a patchy mosaic of stand heights that occur in patterns that reflects natural disturbance (see Warm Moist Potential Vegetation Type). The shapes, sizes, distribution, density, and height of forest patches vary by topography, slope, aspect, and topographic position, such as ridge, mid-slope, toe slope, and valley bottom to provide variety in seasonal habitats, denning, and foraging fisher habitat. Some stands of tall forests, distributed across the warm moist potential vegetation type, provide a high prevalence of large trees and snags of 20 or greater inches diameter at breast height, abundant coarse woody debris, and multiple denning and resting habitat canopy layers (Sauder, 2014; Sauder & Rachlow, 2014).FW-DC-WL-05. Bighorn sheep habitats provide grass and forbs with high protein content, which is maintained by natural disturbance juxtaposed near rugged escape cover. Bighorn sheep habitat reflects its historic distribution and connectivity. Habitat is composed of native vegetation, including upland shrublands, upland grasslands, riparian shrublands, and riparian woodlands. Support the comments submitted by Wild Sheep Foundation groups.Standards for WildlifeFW-STD-WL-01. Canada lynx habitat shall be managed in accordance with the Northern Rockies Lynx Management Direction (U.S. Department of Agriculture, 2007b) and Record of Decision (U.S. Department of Agriculture, 2007a) and any amendments, updates, or new direction forthcoming. The documentation that Idaho ever had a viable, self-sustaining Canada lynx populations is weak, at best. Beginning in 1970, I have spent thousands of hours conducting aerial and ground wildlife field work, predominately on the Nez Perce-Clearwater and Payette National Forests. I have seen two Canada lynx, both together, near Sherman Saddle on the 500 road, in early November, 1976. Extensive bait/hair sample surveys have failed to document a significant presence of Canada lynx anywhere in Idaho. The sporadic, verified Canada lynx reports in Idaho normally occur shortly after the high cycle of snowshoe populations across central and south boarding Canadian provinces. The Nez Perce-Clearwater Forest represents the extreme southern boundary of Canada lynx distribution. Again, with no documentation of historic viable populations, plus no documentation reports of Canada lynx on the forest on recent years, what is the justification for managing for lynx habitat?FW-STD-WL-02. In order to prevent disease transmission between wild and domestic sheep, domestic sheep or goat grazing shall not be authorized in or within 16 miles of bighorn sheep occupied core herd home ranges. Support the comments submitted by Wild Sheep Foundation groups.GuidelinesFW-GDL-WL-01. In order to provide connectivity between watershed basins (HUC 10), corridors of mature and mid-seral forest with canopy closure greater than 40 percent should be retained and should connect to patches of mature and mid-seral forest in adjacent watershed basins. Considerations for location and width should include topography, elevation, and configuration of riparian areas.FW-GDL-WL-02. Infrastructure, such as communication towers and energy developments, should not be located such that they adversely affect dispersal, migration, crucial winter habitat, or movement of wildlife.FW-GDL-WL-03. When closing mines, actions should be taken to avoid loss of bat maternity, hibernation habitat, or bat entombment.FW-GDL-WL-04. New and reconstructed livestock water developments should be equipped with wildlife escape ramps.FW-GDL-WL-05. New authorizations and permit reauthorizations for domestic goat packing should include provisions to prevent disease transmission between domestic goats and bighorn sheep. Support the comments submitted by Wild Sheep Foundation groups.2.3.1 Multiple Uses WildlifeThis section applies to wildlife, such as big game, fur bearers, and upland game, which provide non-consumptive uses and wildlife used by the Nez Perce Tribe for ceremonial, spiritual, or cultural uses. The plan area supports native populations of mountain goat, moose, mule deer, whitetail deer, black bear, wolf, cougar, and bighorn sheep. Prominent in the area are herds of elk, which at one time were among the largest in the nation but have since greatly declined. There is a strong desire by the public, local and state governments, tribes, outfitter and guides, sportsman's groups, and other interest groups to recover and grow elk populations.The current wolf population is not 'native', although there was a remnant population in the North Fork prior to the translocation in 1995-96.The major decline of the elk herds on the Forest occurred during the winter of 1996-97. The "strong desire to recover and grow elk populations' has been ongoing for the past 50 years, and more so during the past 22! EVERY forest plan developed for the Clearwater and Nez Perce National Forests, beginning with the Multiple Use plans in the 1960's, has identified advancing plant succession as the cause

limiting elk populations. With exception of wild fire, and logging, neither forest has adequately provided habitat conditions to reverse the downward trend in Clearwater Basin elk populations.In addition to depressed elk populations, local economies that profit from elk hunting have lost over $10.5 million dollars every year during the past 22 years; the Forest concern regarding providing for local economies doesn't seem very transparent. The iconic Clearwater elk populations are those in the Lochsa, North Fork and South Fork Clearwater, the Selway and the breaks of the Salmon River upstream from Riggins.The accompanying table compares hunter and harvest data for the 13 IDFG game management units in their Clearwater administrative region. Actually, there are 16 game management units in the region, however, three offer permit/draw elk hunting, whereas the other 13 provide general, over-the-counter elk hunting opportunity. The comparison represents the 5-year period prior to the devastating 1996-97 winter, to the last 5-year harvest period, 2015-19. Also, this comparison includes areas off-forest.If the Palouse Zone is excluded from the original 1992-96 vs 2015-19 comparison, and just addresses the game management with predominate USFS lands, the declines are as follows: hunter numbers, -51%; harvest, -50%; days hunted, -54%; bulls harvested, -59% and cow, +299%. In this scenario, the economic loss from fewer hunter days is $9.9 million dollars.GoalsFW-GL-WLMU-01. Habitat contributes to wildlife populations at levels meeting Idaho Department of Fish and Game species management plan objectives. The Forest is way behind the power curve in this, especially in the Lolo and Elk City Zones.Desired ConditionsFW-DC-WLMU-01. Habitat supports opportunities for hunting, fishing, trapping, gathering, observing, photography, subsistence, cultural interactions, and the exercise of treaty reserved rights. Wildlife are distributed in habitats within their respective seasonal ranges.FW-DC-WLMU-02. Habitats in each potential vegetation type function within desired range of variation to contribute to multiple use wildlife needs.FW-DC-WLMU-03. At the forest scale, habitat for wild ungulates provides conditions to meet life history requirements year-round. Vegetation in these habitats are primarily composed of native plants.FW-DC-WLMU-04. Pacific yew plant communities and timbered areas with mature and old yew-wood thickets provide moose winter habitat. Pacific yew is susceptible to sun-scolding. Many past over-story removal timber harvest projects have removed too much over-story and the Pacific yew stands were lost.FW-DC-WLMU-05. Natural processes contribute to the mosaic of habitats needed by ungulates. This concept applies to the non-commercial portions of the forest. However, in the commercial timber components, timber management must be used to create and maintain mosaic habitats needed by ungulates.GuidelinesFW-GDL-WLMU-01. When implementing projects, consider taking action to improve effectiveness of road closures and other travel plan decisions to reduce unauthorized motorized use. Enforcement of closures also needs to be emphasized, and a priority.FW-GDL-WLMU-02. New fencing installation or reconstruction should be designed to reduce barriers to wildlife movement.FW-GDL-WLMU-03. In order to reduce disturbance to wintering big game, management activities should be reduced or minimized in big game winter range between December 1st and March 15th. Does this also include recreational use? I support timber management during this time period. Protection of elk calving need to be addressed from May 1 and June 15.2.3.2Multiple Uses Wildlife-ElkDesired Conditions ForestwideFW-DC-ELK-01. Habitat conditions maintain or improve elk habitat use and provide nutritional resources sufficient to support productive elk populations. The amount and distribution of early seral nutritional resources are consistent with the desired conditions in the Forestlands and Meadows, Grasslands, and Shrublands sections. Elk habitat quality is not degraded by invasive species. Given the wide spread distribution of noxious weeds in the forest, how will this be accomplished, especially in non-roaded and designated wilderness areas?FW-DC-ELK-02. Elk populations are distributed throughout the planning area in suitable habitats. Motorized access does not preclude use of high or moderate quality nutritional resources. According to the Cook, et al. report to the CBC, much of the forest is deficient in high and moderate quality nutritional resources.Desired Conditions Management Area 1MA1-DC-ELK-01. Elk habitats in Management Area 1 provide nutritional resources primarily through natural processes and are consistent with the natural range of variation. Vegetation is composed of native plants. Several larges contagious areas in Management Area 1 are outside designated wilderness, plus these areas support the "iconic" elk herds. Active habitat management needs to occur in these areas in order to support ungulate populations. Obviously, 'natural processes' are the only option in designated wilderness.Desired Conditions Management Area 2MA2-DC-ELK-01. High-quality elk nutrition increases so that between 10-20 percent of each Hydrologic Unit Code 12 in Management Area 2 produces at least 2.6kcal/gram of dietary digestible energy while remaining consistent with desired conditions for vegetation described in the Forestlands section. What management techniques will be used to assure at least

2.6kcal/gram of dietary digestible energy will be produced? How long will this value persist, once created? How is this value measured across large landscapes, how frequently will it be monitored and who is responsible for monitoring? What DDE level is deemed unsatisfactory as per 'high-quality' elk nutrition, and is there a management plan in place to respond then DDE drop below desired conditions?MA2-DC-ELK-02. Areas at least 5000 acres in size exist without motorized access open to the public to maintain habitat use by elk. Areas of high and moderate nutrition potential remain unfragmented by new motorized trails. There need to be enforcement and monitoring to accomplish this condition. Unfortunately, past experience has documented unauthorized creation of trails in many parts of the forest, especially during hunting seasons, which in turn, causes others to violate.Desired Conditions Management Area 3MA3-DC-ELK-01. At least 15 percent of the landscape at the Hydrologic Unit Code 12 scale is composed of high-quality nutritional resources located at distances from open motorized access that promotes habitat use by elk. Open motorized access does not preclude elk use of newly created nutritional resources at the HUC 12 scale. How will this condition be delineated and what is the monitoring and management schedule to maintain this condition over time?Objectives Management Area 1MA1-OBJ-ELK-01. Treat 500 acres of invasive weeds in elk habitat every 5 years. IMO, at best, this is tokenism, the numbers of acres invaded per year will exceed the acres treated.Objectives Management Area 2MA2-OBJ-ELK-01. At least 50 percent of the treatments to accomplish desired conditions for vegetation in early seral habitats over a rolling 5-year time window will be targeted in areas with moderate or preferably high nutritional capacity. Treatments should be designed and implemented to promote and sustain high nutritional capacity for at least ten years. How are areas of 'preferred high nutritional capacity' identified and does this capacity change over time?MA2-OBJ-ELK-02. In Management Area 2, allow vegetation desired conditions to be achieved through wildland fire on 10,000 to 15,000 acres annually, preferably in areas with high nutritional capacity, to contribute to high quality nutritional resources for elk. What is the plan when conditions, for what every reason(s), prevent accomplishing this objective for continuous years? I realize the best habitat for ungulates occurs with late summer/early fall burns, however, resent past experience has shown this will not likely happen every year. Spring burns also provide enhanced nutrition, admittedly not as great as fall burns, however, the opportunity for annual treatments is almost assured, the cost is significantly less, plus done under the proper conditions, will treat both winter and summer habitats. PLEASE, don't lock into only fall burns! Also, IMO, the proposed acreage is too low, considering the entire forest.Objectives Management Area 3MA3-OBJ-ELK-01. In order to create a landscape that produces between 10 to 15 percent high nutritional resources for elk away from open motorized access, 20 percent of the treatments to restore the natural range of variation for early seral habitats in Management Area 3 will be targeted to produce high-quality nutritional resources and be located farther than half a mile from open motorized access. These treatments should be accomplished with methods designed to result in high nutritional response. Why would other treatments be recommended? How were 10-15% and 20% values derived? Again, is there a monitoring system and a plan if areas fall below the objectives?MA3-OBJ-ELK-02. Improve habitat use for elk on 15 percent of Management Area 3 that has high quality or high potential for nutritional resources within 15 years. Does this mean 85% that high quality or high potential habitats will not be treated for 15 years?Guidelines Management Area 2MA2-GDL-ELK-01. To maximize elk habitat, use and avoid fragmenting large areas of elk habitat that is currently not accessible by motorized access. New motorized trails open to the public should not be authorized unless adjacent areas of 5000 acres or larger can be maintained without motorized access. The location of new motorized trails should avoid areas of high or moderate nutrition potential when possible. Is there a map that delineates this information, i.e. areas with over 5,000 acres in Area 2, plus proposed new public trails open to motorized use? As with roads, not all trails have equal impacts.MA2-GDL-ELK-02. To increase available habitat for elk, elk habitat improvement projects should be designed to increase available summer forage in areas of moderate or high nutrition potential. Are there maps that display summer habitat areas with moderate or high nutrition potential for treatment?Guidelines Management Area 3MA3-GDL-ELK-01. When conducting management activities that adversely affect elk habitat use, projects should be designed to maintain or improve predicted percent body fat of cow elk. Factors that maintain or improve predicted percent body fat include one or more of the following: the amount of high-quality nutritional resources usable by elk, increased distances from open motorized routes during spring through fall, improve habitat use on slopes less than 40%, or improved vegetation interspersion. These should be applied at the HUC 12 scale. How will it be determined when management activities will result in adverse impacts to elk habitat use,

and who and how predict percent body fat of cow elk? Also, who will determine which mitigation factors will be used ?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 ForestsThe 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 areasFireWildfire 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!3.2.3.4 Multiple Uses Wildlife - DEISTABLE 1 [ndash] NO WILD BOAR IN IDAHO!!TABLE 1 [ndash] BLACK BEAR [ndash] Important predator of elk calves.Table 1 [ndash] why no mention of bighorn sheep [ndash] they are hunted [ndash] realize they are covered earlier.ELK SECTIONElk herd numbers are influenced by a combination of forage availability, habitat quality, predation, and hunter harvest. Winter weather conditions very important, for example the1996-97 winter resulted in a significant elk die-off the Clearwater Region, one in which they have not recovered in 22 years.This existing condition section focuses on new publications since the 2014 Assessment was produced. This section recaps the population trends and describes the effects and need for change from management direction in the 1987 Plans.Following a decline in early seral habitats, elk populations declined through the 1970s. Increased timber management in the 1970s and 1980s, along with changes in game regulations, once again led to an increase in elk populations during the 1980s through early 1990s. Decreases in timber harvest beginning in the late 1980s and early 1990s correspond to a decrease in elk populations since that time when herds again began to decline in response to increasing loss of early seral habitat. These declines started before wolves were introduced into the plan area in the 1990s. Elk herds have continued to decline or have remained lower since. THIS SECTION NEEDS A TOTAL RE-WRITE: FYI: Unbelievably, the elk mortality

related to the winter conditions during 1996-97 was never mentioned in the DEIS, nor was it mentioned in the Cook report to the CBC. The following is a paragraph from the 2019 Elk Progress Report: [ldquo]Winter 1996[ndash]1997 was marked by severe conditions, including extremely deep snow exceeding 200% of average snow-pack in some areas. These conditions apparently caused higher-than-normal winter mortality, leading to a dramatic decline in the GMU 10 population (-48%). In addition, a survey was conducted in GMU 12 during winter 1996[ndash]1997 and those results suggested a 30% decline at that time. This data, in combination with overwhelming anecdotal information, suggests that catastrophic winter losses occurred in GMUs 10 and 12.[rdquo][SEE ATTACHMENT FOR TABLE Survey data from the IDFG 2019 elk progress report]*The cow harvest in the Palouse Zone is regulated by controlled hunts to address depredation issues.**IDFG and hunters have resigned themselves to the situation.***The issue in the Elk City Zone is quantity and quality of forage.As you can see, the Elk City, Lolo and Selway Zones significantly below management objectives. In all three zones, predation and habitat are the major obstacles in achieving population goals.During the 1960[rsquo]s and through 1974, the hunting season, region wide, was 30 days for either sex elk. Also, during this time, the Forest Service timber machine was in high gear, accessing many unroaded areas, and creating lots of clearcuts. The IDFG was convinced the documented declines in the elk populations were the symptom of advancing plant succession, as the last major fire was the 1934 Pete King Creek fire. All game management units (GMU) in the Clearwater Region were experiencing low calf survival, the average in most all units was 21 calves per 100 cows. In early spring, 1973, a calf survival study was initiated on Coolwater Ridge. In 1968 and 1969, cow elk were trapped n Coolwater Ridge and tested for abortion-causing disease; none were detected. Captured new-born calves were aged, weighted, measured, bled, etc. In addition, they were fitted with a small transmitter collar. The transmitter was motion sensitive; if the transmitter didn[rsquo]t move during a four-hour period the pluses changed from 60-70/minute to 3-400. During the first three years of the study it became apparent predation, primary by black bear, was the major source of mortality. The calf weights, blood values, etc. were all normal or above. In addition, a high pregnancy rate in the cow elk was documented.During the spring of 1976, instead of capturing calves, 75 black bears were live-trapped and relocated on USFS lands around the state. The calf:cow ratio in the study area (1973-76), averaged 21:100; in 1977 it was 61:100; in 1977 the ratio was 51:100. In response to the study, plus the declining elk populations, all elk hunting, statewide, except the Panhandle Region, was restricted to bulls only, plus they liberalized black bear and cougar hunting.In both GMU[rsquo]s 10 and 12, elk populations began to increase after the hunting bag limit was restricted to Bull-only hunting. In GMU 10, the trend counts: 1956, 3,785; 1976, 1,788; 1983, 4,525. The 1983 count is 20% and 71% above 1956 and 1983. In GMU 12 the trend counts: 1969, 2,447; 1975, 1,166; 1984. 2,867 represent 17% and 146% increases over 1969 and 1975.When IDFG initiated the zone management concept, game management units 10 and 12 were combined for the Lolo Zone. Their combined populations continued to increase into the early 1990[rsquo]s, at which time the population exceeded forage capacity. Much of this zone is outside the commercial timber base, thus much of the forage a result if the last major fire, the Pete King Creek fire of 1934, and subsequent smaller wildfires. Collectively, the population in the two management units topped at 18,000[plusmn], in the early 1990[rsquo]s. Thus, it was apparent the elk population growth occurred in light of black bear and cougar predation. Since the winter die-off in 1996-97, the population has remained at [plusmn]2,000. At this low level, plus the addition of wolf predation and declining habitat, elk populations have not able to increase, however, seem to be somewhat stable. Hunter numbers dropped from a 1992-96 5-year average of 4,383 to 828 during 2015-19 period, and the harvest declined from 1,031 during the same time period 147. I strongly recommend Kevin Labrum review the following IDFG progress reports: Lochsa Elk Herd, PR84 and NF Clearwater Big Game Ecology, PR4. These reports document winter elk distribution, by drainage, plus provide elevation distribution information.Elk herd numbers are influenced by a combination of forage availability, habitat quality, predation, and hunter harvest. On the Clearwater, winters have a significant impact on elk populations, for example, IDFG estimated 50-55% of the region[rsquo]s elk population succumbed to the harsh winter. [ndash] see previous comment.Their distribution is influenced by disturbance from roads and hunting pressure. A very misleading statement; perhaps true in heavily logged sections of the forest, by far, not the majority of the Forest.Following a decline in early seral habitats, elk populations declined through the 1970s. Increased timber management in the 1970s and 1980s, along with changes in game regulations, once again led to an increase in elk populations during the 1980s through early 1990s. Decreases in timber harvest beginning in the late 1980s and early 1990s correspond to a decrease in elk

populations since that time when herds again began to decline in response to increasing loss of early seral habitat. These declines started before wolves were introduced into the plan area in the 1990s. Elk herds have continued to decline or have remained lower since. See earlier comments re this situation.Figure 1 [ndash] apparently there is no winter range in wilderness areas??The 1987 Plans from both forests used elk analysis units as the scale for which effects were analyzed. The plans also required that elk analysis units maintain a minimum amount of elk habitat effectiveness of 25 percent, 50 percent, 75 percent, or 100 percent. These correspond to roughly 4.2 miles per square mile for 25 percent, 1.8 miles per square mile for 50 percent, and 0.8 miles per square mile for 75 percent habitat effectiveness. An elk habitat effectiveness (EHE) model computed habitat effectiveness using the density of open roads quality; quantity and distribution of cover, forage, and security areas; and livestock use.Table 5. Number and Acres of Elk Analysis Unit Habitat Effectiveness Objectives under the 1987 Plans WHAT ARE THE 2020 EHE[rsquo]S [ndash] given reforestation in logged areas there should be more cover and less forage.Elk populations in the Clearwater Basin have declined substantially across large areas of the eastern portion of the basin during the past three decades. Declines have coincided with a loss of early-seral habitat, increased human pressures, and increasing predator population (R. Cook, Cook, & Wisdom,2018). The substantial decline was due to the 1996-97 winter, habitat changes are more subtle and don[rsquo]t cause immediate declines. PLEASE DOCUMENT [ldquo]INCREASED HUMAN PRESSURES[rdquo] AS A CAUSE OF ELK DECLINES ON THE FOREST, ESPECIALLY IN THE HABITATS OF THE FORMALLY ICONIC POPULATIONS. The outcomes of management strategies in the 1987 Plans for elk have not been favorable for elk herds. Since 1987, when plans were signed, elk populations in game management zones with low quality or declining forage, high amounts of hiding cover, and low road densities, such as the Lolo Zone, the Selway Zone, and some game management units in the Elk City Zone, have declined. Meanwhile, those with high quality and quantity of forage, such as in the Palouse, Dworshak, some portions of the Elk City, and Hells Canyon zones, have increased or remained at the Idaho Department of Fish and Game objective, despite having high road densities and high vulnerability. Lukacs et al (2018) studied elk population trends in 101 elk management units from 7 states in the western United States. They tested the effects of predator richness, forage productivity, and precipitation on elk population performance. Forage productivity on summer and winter ranges had the strongest effect on elk recruitment relative to other factors.Without adequate summer and fall nutrition, females cannot successfully produce a healthy calf to weaning and a calf cannot enter the winter period in adequate condition to withstand prolonged periods of severe weather. A substantial number of elk winter within the Nez Perce-Clearwater. Has this been documented as an issue on the forest? If so, please document.Yearling pregnancy rates. Not important in elk population dynamics!Selenium. Preliminary results indicate elk limitations in animal condition are primarily associated with summer nutrition as opposed to winter. Body condition and pregnancy rates of elk in the Clearwater basin indicate that limitations in animal condition are primarily associated with summer nutrition as opposed to winter. Variation in body fat levels of female elk followed a northeast-to-southwest geographic gradient of study areas, with body fat highest on the North Fork Clearwater, lowest on Craig Mountain and the South Fork Clearwater, and intermediate in Dworshak Reservoir area. Elk populations and their distribution in the Clearwater Basin are highly variable. Populations and productivity of herds have declined during the past 20 to 30 years in eastern wildlife zones, which are largely associated with roadless and wilderness. The entire region is selenium deficient. All 4 areas very different in habitats and mgmt. conditions.Elk populations and their productivity in the central and western parts of the basin have increased during the past two decades, sometimes substantially. Examples include the Palouse and Hells Canyon Zones, where elk numbers were low or nonexistent a few decades ago. Should not be much of a surprise, as Hells Canyon has great grass ranges, whereas the Palouse has lots of private property, ag land, and lots of security from people and predators.the best model overall was Model 6, which was a modified expert opinion model of dietary digestible energy. I have concern about an [ldquo]opinion[rdquo] model [ndash] will get what you want!Data also indicates that herds in the Clearwater basin have relatively low levels of autumn body fat, body size, and pregnancy rates. Was this consistent across all study areas? How were pregnancy rates determined and by whom?Some winter ranges along the Lochsa have high nutrition potential. The plan does not emphasize treatments within winter ranges but it should be within the best nutrition potential sites when doing so. While still important, treating winter ranges does not appear to provide conditions that would improve elk vital rates based upon nutrition. Unbelievable!! All eggs in one basket.When nutrition during the summer and autumn

is poor, cow elk are likely to breed later than cows with good body condition or not at all. Was this documented as a problem on the Forest?Cook et al (R. Cook et al., 2018) suggests substantial emphasis on summer range management is probably warranted. Does warranted mean needed?Of the additional seven elk populations monitored in the Clearwater basin, all showed summer and fall nutritional limitations (Mary M. Rowland et al., 2018). Did not see the Clearwater Basin elk data that supports this statement.Over 30 studies conducted during the past 40 years on public lands have shown consistently strong avoidance by elk of roads and motorized trails open to public (M. Wisdom & Rowland, 2018; M. J. Wisdom et al., 2018). Avoidance distances can occur at 0.5 to 1.5 miles from open roads, meaning that landscape use by an elk population can be substantially diminished within these distances from open roads and trails. Elk avoidance of all-terrain vehicles and dirt bikes on motorized trails has been shown to be similar to or greater than the species avoidance of forest roads open to public motorized access. Many studies are described and referenced in the Assessment (U. S. Department of Agriculture, 2014a) in relation to effects of roads. The primary effect of roads is that elk may be displaced from otherwise usable habitats and may be displaced from public lands onto private lands where they are not accessible to public uses. Not all roads are equal [ndash] Lolo Motorway vs Newsome Creek for example.Instead, Rowland et al (2000) suggested that elk are responding to the spatial distribution patterns of roads as an important factor, which is not necessarily measured by road density or habitat effectiveness. Simulations of road spatial patterns suggested that evenly spaced roads had the greatest effect on habitat while randomly spaced roads and clumped patterns of roads allowed for less influence on habitat selection (M. M. Rowland et al., 2000). Thus, distance from roads, or the spatial distribution of roads, is a more important measure for elk habitat selection than road density per se?Their results suggest that, during hunting seasons, female elk still seek out areas of high nutritional value even when they are near motorized routes. Ranglack et al (2017) cautioned that extrapolation of their results beyond the study area may or may not be appropriate as results generated in one area may perform extremely poorly when applied in areas that are geographically distant or dissimilar ecologically. Conditions on the Nez Perce-Clearwater are substantially different than those in western Montana. THIS IS AN ISSUE WITH EXTRAPOLATING ANY STUDY RESULTS FROM OUTSIDE THE FOREST! The study demonstrated how habitat use can be improved through silviculture and how areas of enhanced nutrition may not be used by elk if distance effects of open roads encompass the areas of higher nutrition. They recommended four variables that determine elk habitat use: distance from roads, the amount of higher quality nutrition, forage to cover edges, and slope. MOOSESchrempp et al (2019) evaluated moose population trends and forage condition trends across Idaho. They found that the quantity of forage shrubs was estimated to have declined over the past 30 years in about half of the population management units, with the greatest declines predicted for high-energy forage species. The population trend index was correlated with the percent change in availability of moderate-energy forage shrubs, indicating that the availability of forage shrubs and change in availability over time might be affecting population dynamics for moose in northern Idaho IMO, on the Forest, wolf predation is the primary cause of moose decline. Steep ungulate population declines are more characteristic of a severe event rather than gradual habitat changes.This suggests that fire suppression, lack of disturbance, and forage quality and quantity are likely important threats to moose populations. Habitats in GMU[rsquo]s 16A, 17, 19, and 20 have a large amount of recent fire history, yet the moose populations are in the toilet!Factors identified by the Assessment (U. S. Department of Agriculture, 2014a) as causing declines in moose include roads, predators, climate change, parasites, and loss of yew. Multiple-use wildlife plan components were designed to provide for many big game species including moose. For example, FW-DC-WLMU-03 and FW-DC-WLMU-04 pertain to moose habitat conditions, including the desire to maintain pacific yew as a winter food.Mountain GoatA hunter is allowed only one opportunity to hunt for mountain goats in his lifetime. Not true, if no harvest can re-apply in 3 yrs. Once in a life time upon harvest, can reapply after three years if unsuccessful.The mountain goat is recognized as a Species of Greatest Conservation Need (SGCN), priority Tier 3, in the Idaho State Wildlife Action Plan (Idaho Fish and Game, 2017).Migration to wintering areas occurs along well-traveled corridors with the first heavy snowfall. Winter ranges are typically at lower-elevation cliff complexes with south and west aspects where snow is less abundant and persistent. However, some populations in the plan area winter and summer in the same areas. Where on the Forest, have significant migrations been documented, when and by whom?Threats identified in the Draft Idaho Mountain Goat Plan include road building, timber harvest, mining, power or infrastructure, oil and gas extraction, wildfire and fire

suppression, or changing climate, which may reduce the limited habitat that currently exists (Idaho Fish and Game, 2019a). The only treatments for mtn goat habitat on the Forest are fire and fire suppression. Also, and IMO, mtn lion predation is a significant threat, especially when other ungulate populations are depressed.Mountain goats are susceptible to disturbance by recreational activities, both motorized and non-motorized, and may abandon preferred high-quality areas because of disturbance. Several modes of backcountry recreation, including snowmobiling and heli-skiing, have the potential to disturb goats. Helicopters generate the disturbance of greatest concern. Repeated disturbance by helicopters, snowmobiles, logging, or road building can cause displacement from habitat, group dissolution, nanny-kid separations, and injury. The extent to which these disturbance threats are in effect in the plan area depends upon whether these activities are allowed where the herds are currently located. Nearly all existing herds are observed within either Idaho Roadless Rule areas or designated wilderness. Since road building and logging are restricted in these two areas, these threats are greatly reduced. There is local concern for impacts of winter motorized recreation on mountain goat populations in the plan area. BASED UPON WHAT DATA?Climate change modeling in both coastal Alaska and the Washington Cascades suggest that mountain goat ranges will shrink up to 86 percent under some scenarios, becoming more fragmented and isolated by the end of the century (Johnston et al, 2012; White et al, 2018). What can the USFS or the IDFG do to compensate for climate change??Winter range is important to the long-term survival of mountain goats and should be identified and managed to reduce disturbance to mountain goats. Kuck, IDFG, documented goats in the Salmon area select winter sites based on snow-shedding rather forage availability.The status of some of these smaller populations is in question recently but actual flight counts are lacking. The most acute decline is within the Blacklead population within the Hoodoo Recommended Wilderness Area, where the Idaho Department of Fish and Game has documented sharp declines in mountain goat numbers. Most observations are those incidentally observed during elk surveys. THUS, NOT A VALID SURVEY!The mountain goats between Snow Peak and Black Mountain reside in the Mallard-Larkins primitive area. The most recent survey, in 2017, counted 128 mountain goats in the Black Snow Population Management Unit; however, the eastern portion of the population management unit showed a substantial decline from the previous survey. There are concerns with increasing snowmobile and snow bike access to mountain goat habitat in both the west part of Game Management Unit 9 and the east portion of Game Management Unit 10 in the Black Snow Population Management Unit. Is there motorized winter recreation where the decline occurred?Lochsa-Selway Population Management UnitThe Lochsa population varied from a high of 85 mountain goats in 1987 to 48 in 1996, the last year surveyed. Mountain goats are still observed through much of the area at low numbers and may still have similar population levels. What is this information based upon, as IDFG mountain goat specific flights are not done on a regular basis?Timber encroachment on small islands of habitat due to fire suppression has likely impacted mountain goat distribution over the last 60 years. What is this documentation for this statement and where has this occurred?The last full survey of the South Fork and South Main Salmon occurred in 2003 where observers counted only three mountain goats. Most of the habitat in this unit is remote and unroaded. The potential impacts of motorized and non-motorized recreation are minimal. What is the speculated cause for declines? 42 to 36 between 1982 and 1990 and 3 in 2003, neither if these areas has much, if any, winter recreation?Across the ForestObservations of mountain goats from 1956 to 2018 show that 49 percent of observations of mountain goats in the plan area have been documented in Idaho Roadless Rule areas, 46 percent have been observed in designated wilderness, and about 4.2 percent have been observed within the general forest portion, or Management Area 3, of the Nez Perce-Clearwater. See earlier statement about winter recreation.Included, for your records, is an overview of mountain goat hunting units and permit levels from the early 1972 to present:[SEE ATTACHMENT FOR TABLE REGION 2 MOUNTAIN GOAT HUNT UNITS AND PERMIT LEVELS]Mule DeerWhile whitetail deer are ubiquitous, mule deer in most areas of the Nez Perce-Clearwater occur in limited pockets of suitable habitats, which includes shrubland. Mule deer populations in the plan area are generally stable compared to those in other parts of the state, which exhibit a wide range of variability. Mule deer populations across the region, including in the plan area, appear to be increasing, partly in response to very conservative harvest management. What data indicates MD are stable?Weather, fire, and plant succession have ultimately played a much larger role in mule deer populations than efforts of wildlife managers Liberal seasons played a large part in mule deer population levels. Whitetail DeerWhite-tailed deer hunting is economically important in Idaho. Deer hunting, including both white-tailed and mule deer, provided 840,000

hunter days and generated $109 million in retail sales in 2001 (IAFWA, 2002). Approximately 2,000 jobs were tied directly to deer hunting in 2001 and resulted in $1.3 million in state income tax. Forest Service lands in the plan area that are popular for deer hunting comprise substantial portions of Clearwater, Latah, and Idaho Counties. Based on Cooper et al (2002)), the combined economic impact of deer hunting in those three counties alone was in excess of $31 million in 2007.Whitetail deer populations are generally healthy in most of the Nez Perce-Clearwater but may have declined in Game Management Units 16A, 17, 19, and 20 due to forest succession. In recent years there have been thousands of acres burned by wildfire. Forest succession is a problem in units 15 and 16 and to some degree 14.Gray WolfWolves are a factor in declines of elk herds in some parts of the planning area, particularly in the Lolo and Selway Elk Management Zones. This is interesting, predation was hardly mentioned in the elk section, it was all summer habitat and nutrition.Consequences of Plan DirectionEcosystem Plan ComponentsThere are three guidelines included in plan direction for the management of multiple use wildlife species. FW-GDL-WLMU-01 recognizes the impact that unauthorized routes have on game species and seeks to minimize these impacts. FW-GDL-WLMU-02 is a guideline that requires new fence installation be designed to reduce impacts on wildlife movements. While the plan does not emphasize active management in winter range, FW-GDL-WLMU-03 is a guideline designed to reduce disturbance during critical time periods of the lifecycle of big game species. Earlier sections and documentation state winter range is important!ElkAs elk received much interest from both government agencies and the public, they are emphasized in the plan as a key focus for improving their habitat conditions and populations in the plan area. While the focus was on elk, many of the other multiple use species will also benefit from habitat management for elk. The Nez Perce-Clearwater collaborated extensively on plan components for elk based upon the best available scientific information. WINTER RANGE HAS TO BE INCLUDED! Focusing solely on summer habitat is very myopic!Conceptual Basis for Management of Elk on the Nez Perce-Clearwater National ForestImprove the condition of elk habitats in the plan area base upon increased awareness about the factors that most importantly influence elk populations. IS THIS A TRUE STATEMENT FOR THE MAJORITY OF ELK HABITAT OVER THE ENTIRE FOREST? ALSO, THIS AWARENESS HAS BEEN PREACHED BY IDFG SINCE THE MID-1960[rsquo]S, TO NO AVAIL!Two concepts, nutrition and habitat use, provide the foundation for managing elk populations, encompassing both hunting and non-hunting periods on the Nez Perce-Clearwater under the proposed plan. Forest plan direction is most logically built on these two concepts incorporating best available science.The desired condition FW-DC-ELK-01 emphasizes these two concepts as a management framework for elk. Nutrition is defined as the dietary nutrients needed by a lactating female elk to meet its maintenance needs during summer and fall, a period of nutritional stress in response to demands of a calf at heel. Adequate summer-fall nutrition of a lactating female ensures survival of her calf through winter and allows the female to be in sufficient condition after weaning to again produce and recruit a calf the following year, avoiding alternate-year calf production by a female. HAVE LOW PREGNANCY RATES AND ALTERNATE-YEAR CONCEPTIONS BEEN DOCUMENTED ON THE FOREST?The Nez Perce-Clearwater selected HUC12 for the scale at which to apply these measures in the proposed plan because HUC12[rsquo]s are commonly used as an unbiased sized area delineated by landscape features and are used by a variety of resource specialists in managing the forest and would be compatible for integration. HUC12[rsquo]s also meet or exceed the size criteria to meet summer fall use. In comparison, HUC12[rsquo]s are about twice the size of the elk analysis units used in the 1987 Plans. Rowland et al (2018) provided example applications of nutrition and habitat use evaluations for regional and local landscapes for elk management.An additional consideration is the desired harvest and hunter opportunity during fall hunting seasons and associated effects on elk distribution and population performance. Past management has addressed this issue through the concept of elk security or habitat security, which has been defined and used in a wide variety of ways, many of which are contradictory and confusing. Importantly, past definitions do not recognize the important role of nutrition and habitat use as foundational to management of elk hunter harvest and hunter opportunity.Current conditions in the plan area suggest the limiting factor is forage, rather than hiding cover, as cover is abundant in the plan area. AGREEThis is not intended to disparage the concept of elk security but its use needs to be updated to reflect contemporary concepts of producing and sustaining a productive and abundant elk population based on nutrition and habitat use. Furthermore, the research cited above suggests these concepts require updating to consider the spatial arrangement of roads, rather than a simplified density estimate without taking into account the interaction of nutrition and roads. The framework emphasizes the

distance from roads rather than road density and integrates nutrition and other factors widely known to influence elk habitat use, such as slope and arrangement of seral conditions at a landscape scale, flexible enough to provide what elk need within watersheds.Goals that underlie hunting management of elk habitat use and nutrition include a public land manger[rsquo]s desire to: 1)Minimize distributional shifts to private lands. 2)Meet Tribal First Food objectives. 3)Meet hunter harvest objectives or avoid overharvest.4)Meet hunter opportunity desires. Currently down nearly 74 thousand hunter days and have been for the past 22 years!5)Minimize non-consumptive effects. 6)Meet fall nutritional needs of lactating females and associated habitat use objectivesHabitat use includes nutrition to ensure that there is an elk population to manage for hunting. Isn[rsquo]t nutritional habitat the goal for all habitats??Thus, in the plan components for Roadless Rule areas, emphasis is on higher nutrition at a landscape scale under MA2-DC-ELK-01 while maintaining the large areas without motorized access that could be impacted by development of new motorized trails. MA2-DC-ELK-02 and MA2-GDL-ELK-01 emphasize retaining areas of 5000 acres or larger without motorized vehicles consistent with Ranglack et al (2017).Management Area 3 is the least restrictive management area for habitat alteration to improve elk habitats. Watersheds in Management Area 3 could benefit from increasing high quality nutrition to help alleviate the effects of roads.FW-DC-ELK-01 and MA3-GDL-ELK-01 are intended to help managers move ecological conditions towards higher habitat use and increasing nutritional resources for elk.High quality nutritional resources are defined as areas that produce vegetation with greater than or 2.6 kcal/g of dietary digestible energy. It is not likely sufficient to create early seral conditions in areas with a poor nutritional response if the expected outcome is to provide elk forage. Small percentage changes in the amount of high-quality nutritional resources at a landscape scale can have dramatic effects on predicted elk fat. How is dietary digestible energy measured, who and how frequently is it measured? What happens when a habitat drops below the threshold?Preliminary results are very favorable and show that the amount of high-quality forage increases throughout the 50-year timeframe modeled under all alternatives. It takes its largest jump in the first decadal time step. The results suggest about a 26 percent increase in the area of forage that produces greater than 2.58kcal/g of dietary digestible energy over the 50-year timeframe compared to current conditions. This estimate is roughly similar under all alternatives.Studies on elk from the Clearwater Basin Collaborative Elk Project suggest that an increase from 5 to 20percent of the landscape having more than 2.75 kcals/g of dietary digestible energy can increase percent body fat from about 8 up to 12 percent and increase pregnancy rates for female elk from approximately 40 percent to nearly 100 percent. Where were 40% pregnancy rates documented?These changes in body fat should improve both calf and female elk survival during winter. The largest jump in elk nutritional resources is in Management Area 3, followed by Management Area 2, and then Management Area 1. Have recent, significant winter mortality in calves and cows been documented?Current estimates of body fat measured on captured female elk suggest they are currently below 8percent on herds in the South Fork Clearwater samples, just below 10 percent on North Fork Clearwater elk, just above 9 percent on the Lochsa elk samples, and about 8 percent on the Riggins population samples. Pregnancy rates are between 70 to 95 percent in these herds. Increasing pregnancy rates among female elk would directly increase reproductive performance and elk populations. ONLY IF NUTRITION IS THE PRIMARY ISSUE.According the nutritional response spatial layer, some of the poorest areas for predicted nutritional response are on winter ranges because of thinner soils and drier conditions. Therefore, while winter habitats are important to big game, the plan components do not emphasize treating winter habitats. Rather, the plan emphasizes reducing disturbance in plan component desired condition FW-DC-WLMU-03, which expresses a desire to provide for big game habitats year-round, including during winter. The intent of guideline FW-GDL-WLMU-03 is meant to reduce disturbance during winter.Therefore, desired condition FW-DC-ELK-01 contains language that would direct management to operate within the framework of the terrestrial vegetation components. Objectives for elk management are nested within desired conditions for ecosystem plan components. Review FW-DC-ELK-10Objectives for managing elk habitat are nested within objectives for ecosystem plan components.Therefore, objectives for elk management are nested as a percent of treatments to restore the natural range of variability to be directed towards the areas with the highest nutritional responses. Alternative X is the most aggressive in terms of the amount and rate at which desired conditions are achieved, followed by Alternative W then Y. Alternative Z is the least aggressive towards restoration. Therefore, the most aggressive actions towards improving elk forage are in that order as well. See Section 2.3.2 for specific plan components pertaining to elk.Moose use forested habitats in the winter and

particularly rely upon Pacific yew as winter forage. FW-DC-WLMU-04 emphasizes Pacific yew as a winter food for moose. WHERE OUTSIDE THE SO FK IS YEW THE PREFERRED WINTER FORAGE?Mountain GoatsFew plan components are directed towards mountain goats, as most habitats are inaccessible to anthropogenic threats. FW-DC-WLMU-05 and FW-DC-WL-03 would help to increase connectivity for mountain goats. Lack of connectivity from current populations to unoccupied suitable habitats has caused mountain goat habitats to remain unoccupied and is thought to be caused by fire suppression, which creates conditions unfavorable to mountain goat travel at high elevations.Mountain goats are sensitive to disturbance and tend to leave suitable habitats if disturbed. PLEASE DOCUMENT THIS IS AND/OR HAS OCCURRED ON THE FOREST [ndash] with best science documentation.Alternatives for recommended wilderness in the Hoodoo area, the Mallard-Larkin area, Moose Mountain, and Bighorn Weitas would include several mountain goat herds, including some of the largest herds in the plan area. Allowing these areas to be open to motorized over snow travel could potentially expose mountain goats to this disturbance.To understand snowmobile use in the plan area, landscape characteristics selected by snowmobilers were modeled spatially to evaluate the overlap of mountain goat habitats and other wildlife habitats with modeled snowmobile preferences (Olson et al., 2017). Modeling was conducted by Lucretia Olson and used parameters similar to those she used in Olson et al (2017). The model was validated by user data and Forest Service recreation staff who have expert knowledge of the use in the plan area. The snowmobile model is a function of terrain, access, canopy cover, and snow depth, which are features that may contribute to the ease of which snowmobilers can use an area.Preliminary model results suggest low amounts of overlap between snowmobile use and known mountain goat population areas. This makes sense because most mountain goat habitat is too steep for comfortable snowmobile use. However, some areas predicted to have high probability values in the snowmobile model are in proximity to known mountain goat herds, particularly the herd on Blacklead Mountain, which may leave them susceptible to access by highly skilled snowmobilers. The model only predicts snowmobiler preferences and does not predict snow bike use, which may have different use patterns than snowmobiles.Bighorn Sheep The bighorn sheep in the plan are provided through plan components for ungulates. FW-DC-WLMU-03 emphasizes that the habitats in the plan area provide for ungulate species that meets their life history requirements in both summer and winter. FW-GDL-WLMU-03 restricts disturbing activities on winter ranges, which will serve to protect these species during this challenging time. Agree and support direction in the plan for management of bighorn sheep habitat and allotments.No Action AlternativeSeveral species of wildlife used by the public would continue to experience declining habitat conditions due to forest succession and fire suppression. Emphasis for elk would continue to be on treating winter range and providing elk security addressing road density while not directly responding to the best available scientific information indicating that providing adequate summer nutrition usable by elk would increase elk vital rates.Preliminary modeling results suggest that, under all alternatives, the amount of high-quality forage greater than about 2.6kcal/g of dietary digestible energy would increase by about 26 percent. When do you expect [lsquo]final[rsquo] results?? Again, how is this measured, where, how frequently, etc.?In the No Action Alternative, over snow motorized travel is not allowed in recommended wilderness [ndash] IS THIS STATEMENT REALLY NEEDED?Mountain goat populations in the Hoodoo recommended wilderness area would not be subject to motorized over snow travel, as it is currently not allowed. In other alternatives, over snow travel would be allowed.Use of game carts, chainsaws, mechanized travel such as bicycles, and aircraft would continue to be prohibited in recommended wilderness.Cumulative EffectsAlternative WAlternative W reaches desired vegetation conditions faster than the No Action Alternative and slightly slower than Alternative X. Thus, it has a relatively more aggressive schedule for restoring the system back to the desired conditions, which are based upon the natural range of variation. For ungulates, this quicker paced schedule would improve forage resources quicker than the No Action Alternative.The desired conditions for vegetation do not vary by alternative. However, vegetation management would contribute substantially to forage as well, especially within Management Areas 2 and 3. Under Alternative W, forest conditions would trend towards increased nutrition to meet the needs of many multiple use species. Proactive management through prescribed fire and managed wildland fire would occur more proactively under Alternative W in Idaho Roadless Rule areas, especially within backcountry restoration themed areas.The amount of recommended wilderness would increase the most under Alternative W. In addition to the Hoodoo, the Mallard-Larkin, and the Selway additions, this alternative would add Bighorn-Weitas, North Lochsa Slope, East Meadow Creek, Moose Mountain, Rapid River, North Fork Spruce-White Sands, Sneakfoot

Meadows, Meadow Creek-Upper North Fork, and West Meadow Creek. This amount of recommended wilderness would be the most compared to the other alternatives.The ability of the forest to pursue active management to achieve desired conditions would be most constrained in this alternative compared to the others because of the high amount of recommended wilderness, which would change many areas that are currently in the backcountry restoration theme into the backcountry recreation theme.Under this alternative mechanized travel is prohibited in recommended wilderness, as well as game carts.Alternative XAlternative X reaches desired vegetation conditions the fastest out of all the alternatives and slightly faster than Alternative W. Thus, it has the most aggressive schedule for restoring the system back to the desired conditions, which are based upon the natural range of variation.Preliminary modeling results suggest that, under this alternative, the amount of high-quality forage greater than about 2.6kcal/g of dietary digestible energy would increase throughout the plan area at the fastest rate. Vegetation management would contribute substantially to forage, especially within Management Areas 2 and 3.As no areas would be identified as recommended wilderness, this alternative has the least constraints on improving habitat for big game. I SUPPORT ALTERNATIVES THAT IMPROVE THE MOST WILDLIFE HABITAT, ESPECIALLY THOSE HABITATS THAT HAVE HISTORICALLY PROVIDED THE ICONIC ELK HERDS ON THE FOREST.The amount of recommended wilderness would be none under Alternative X, which would reduce the amount of recommended wilderness compared to the No Action Alternative.The ability of the Nez Perce-Clearwater to pursue active management to achieve desired conditions would be most proactive under this alternative.The ability of the Nez Perce-Clearwater to pursue active management to achieve desired conditions would be most proactive under this alternative.Alternative YAlternative Y would reach desired vegetation conditions faster than Alternative Z and the No Action Alternative but slower than Alternatives W and X. For ungulates, this more moderate paced schedule would improve forage resources quicker than the No Action Alternative but slower than Alternatives W and X. While the pace may be quicker, at the end of five decades, the amount of high-quality forage is slightly less than in other alternatives. Please quantify these terms.Proactive management through prescribed fire and managed wildland fire would be moderate under Alternative Y in Idaho Roadless Rule areas compared to Alternatives W and X. What exactly does this mean?Under Alternative Y, one of the larger mountain goat meta-populations in the Nez Perce-Clearwater and one of two core mountain goat areas within the Blacksnow Population Management Unit would be excluded from recommended wilderness. Mountain goat populations in the Blacksnow Population Management Unit were used as a source of goats to transplant into other portions of the state for 40 years (Idaho Fish and Game, 2019a). This population appeared stable to increasing during times when the transplants were occurring. The Idaho Department of Fish and Game counted these populations in 2017 and found the mountain goat population in the eastern portion of the unit, which would be those in the Blacklead areas of the Hoodoo recommended wilderness area, showed a substantial decline from the previous survey (Idaho Fish and Game, 2019a). In the past, Idaho Department of Fish and Game surveys in this area occurred in the late winter or spring (Idaho Fish and Game, 2019a). There are concerns with increasing snowmobile and snow bike access to mountain goat habitat in the east portion of Game Management Unit 10 in the Black Snow Population Management Unit (Idaho Fish and Game, 2019a). Changing the boundary for these mountain goats could have adverse environmental consequences for this metapopulation of mountain goats. PLEASE EXPLAIN STATEMENT RE [ldquo]CHANGING THE BOUNDARY[rdquo]Under this alternative, mechanized travel is prohibited in recommended wilderness, as well as game carts. The prohibition of mechanized travel, such as bicycles, would have slight benefits to big game because mountain bikes have been documented to displace elk (M. J. Wisdom et al., 2018). Under this alternative, this activity would be prohibited.NOTE TO SELF: THIS PLAN REMINDS ME OF GRADUATE THESIS[rsquo]S IN DAYS GONE BY [ndash] THE THICKER THE BETTERAlternative ZAlternative Z would reach desired vegetation conditions at a similar rate to the No Action Alternative but slower than Alternatives W and X. Thus, it has a relatively more relaxed schedule for restoring the system back to the desired conditions, which are based upon the natural range of variation. For ungulates, this more moderate paced schedule would continue to impair forage resources and cause continued declines in elk, deer, and moose populations due to forest succession and lack of forage. IMO, THIS STATEMENT WILL DEFINITELY LEAD MOST RESIDENTS IN THE CLEARWATER REGION AWAY FROM THIS ALTERNATIVE![ldquo]The less proactive schedule[rdquo] Please quantifyAlternative Z is second highest alternative for the amount of recommended wilderness compared to the other alternatives. The change in the amount of recommended

wilderness would have environmental consequences on mountain goats, furbearers, elk, and other ungulates and predatory big game as described belowUnder Alternative Z, more mountain goat populations would be included in recommended wilderness than in all but Alternative W. However, the mountain goats in recommended wilderness under this alternative would still be subject to disturbance from motorized over snow travel. Under this alternative, mechanized travel is allowed in recommended wilderness, as well as game carts.Livestock GrazingDirect interaction between livestock and game species are likely to occur. The extent of the effects depends upon the overlap of wildlife habitat and livestock allotments. Allotments are limited in the plan area. Only about 14.8 percent of the Nez Perce-Clearwater is grazed. Allotments occur in the Palouse district and along the western portion of the plan area from near Musselshell Meadows southward. Nearly all the allotment areas are habitat for a variety of multiple use species. For example, elk and whitetail deer occur almost forestwide, except in cliff areas. In contrast, mountain goats rarely occur within allotments. Most of the allotments are grazed by cattle and the plan only has one sheep allotment, which is vacant. Big game species are among those affected the most by grazing. Recommend eliminating domestic sheep grazing on the forest as well as rules and regulations regarding the use of pack goats in and/or near bighorns sheep habitat. Management Area Allocations.The framework of the proposed forest plan and alternatives is that the Nez Perce-Clearwater is managed within three management areas. Management Area 1 is designated areas, such as designated wilderness or designated wild and scenic rivers. Management Area 2 is largely composed of Idaho Roadless Rule areas and will also include research natural areas and suitable wild and scenic rivers. Management Area 3 is the front country and is meant to be managed as general forest.Management is most restricted within Management Area 1 and the least restrictive under Management Area 3. Management Area 2 is intermediate between these two.components will help ensure that uses allowed within Idaho Roadless Rule areas continue to provide for multiple use species, such as elk.Recreation and Access ManagementThe recreation opportunity spectrum establishes the settings under which various recreational activities are permitted or disallowed, especially those that allow or disallow motorized recreation. Does this include [ldquo]mechanized[rdquo]?The intention in some of our plan is to connect trails and provide more loop opportunities for motorize trail use in both Management Area 3 and Management Area 2. The plan components for elk habitat and access have struck a balance to allow for these opportunities while conserving the wildlife resources.Winter recreation opportunity spectrum settings differ from those in summer. The rational being that effect of motorized use over the snow differ from those in the summer because winter recreation does physically alter the land in the form of a road or trail. I DON[rsquo]T UNDERSTAND HOW THE LAND IS ALTERED BY A SNOWMOBILE TRAIL!The winter recreation opportunity spectrum allows much more liberal use of snowmobiling than summer motorized travel. While the recreation opportunity spectrum technically allows snowmobile use, users tend to gravitate towards areas with fewer trees, smoother ground, less steep slopes, and are influenced by the placement of access points and roads. Motorized over snow travel within winter range for big game could be detrimental to winter survival.An area may be suitable for motorized use but that does not mean motorized use is allowable everywhere in that setting. Motorized use by wheeled and/or over-snow vehicles is restricted to designated trails, roads, and areas, as shown on the motor vehicle use maps for the Nez Perce-Clearwater. Travel management decisions are separate, project-level decisions that determine the specific areas and routes for motorized recreation consistent with the desired recreation opportunity spectrum, as mapped.Hiking, mechanized, and motorized recreation has been shown to displace elk from important habitats, sometimes to great distances (M. J. Wisdom et al., 2018). Some of these disturbances are more impactful than other. For example, motorized use by ATV[rsquo]s evoked the largest distances while cycling was intermediate and hiking and horseback riding had the smallest distances of displacement. It is well established that elk are displaced from habitats by motorized traffic as dozens of studies have shown avoidance behavior and displacement. There are many factors that determine how wildlife react to human encounters, be it on foot, etc. A [lsquo]one size fits all[rsquo] mentality should not be mandated.FW-DC-REC-07 is a desired condition that recreation would be designed to minimize environmental impacts. Plan components in the elk section of the draft plan have measures to address motorized routes and are specific to in the management areas. They to apply appropriately to projects that seek to create new motorized trails in Management Area 2 and new motorized roads or trails in Management Area 3. These plan components are adequate to address concerns during projects conducted under the plans.