

## Hanlon Timber and Fuels Management Projects Responses to Comments Received During 30-Day Comment Period

*From Richard Artley*

### **Comment #1 -**

There are 2 places where Dr. Cohen are mentioned in the EA:

In Chapter 5, Page 113 – Literature Cited:

“Cohen, Jack. 1999. *Reducing the Wildland Fire Threat to Homes: Where and How Much?* USDA Forest Service Gen. Tech. Rep. PSW-GTR-173. 6 p. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Fort Collins, Colorado.”

“Cohen, Jack U; Butler, Bret W. 1999. *Modeling potential ignitions from flame radiation exposure with implications for wildland/urban interface fire management*. In: Proceedings of the 13th conference on fire and forest meteorology; 1996 October 27-31; Lorne, Victoria, Australia. Fairfield, WA: International Association of Wildland Fire.”

My how strange it is that Dr. Cohen was never cited in the EA or its appendices.

If you even read the two Cohen papers shown above you would know that Dr. Cohen’s research indicates that cleaning up the fine fuels around a home is orders of magnitude more effective at protecting homes from wildfire damage than commercial logging . . . especially since your unit locations average 7.4 miles away from these communities.

### **Response:**

The objectives of these (proposed) treatments are to:

1. Reduce the threat of severe surface and crown fire within the Hanlon area.
2. Reduce accumulated surface, ladder and crown fuels.
3. Improve Fire Regime Condition Class (FRCC). Move stands from Condition Class 2 and 3 to Condition Class 1.
4. Promote the stocking of fire tolerant conifer species such as western larch, ponderosa pine and Douglas-fir.
5. Stimulate the growth of hardwood species such as aspen, birch and redstem ceanothus which are desirable for wildlife forage.
6. Encourage old growth habitat of fire dependent ecosystems.

Note: Structure protection is not part of the purpose and need of this proposal.  
(Pages 44 & 45 – Hanlon Environmental Assessment, October 2009)

In reference to literature cited by Jack Cohen and Bret Butler:

Jack Cohen’s work is referenced on page 46 of the EA as shown in the following discussion.

### **Structure Risk and Effect on State and Private Ownerships within the Hanlon Wildland Urban Interface (WUI)**

Home and structure risk to potential wildfire is largely dependant on the following: 1) Flammability of building materials; 2) Adjacent wildland fuels; and 3) Firebrands.

- 1) Flammability of building materials: The ignitability of building materials is the single most important consideration for determining structural risk during a wildfire event (Cohen 1999). Shake/shingle roofs, wood siding, decks and unscreened vents are especially vulnerable from both on and off-site ignition sources.

There are over 60 structures and homes within the Hanlon analysis area; most all located on private property, outside the jurisdiction of the USFS and the scope of the proposed action. The WA DNR and

local county fire districts administer programs specifically designed to address this issue. Other than signs, fences and historical sites (i.e. remains of homesteads and tram towers), there are no known structures on NFS ownership within the analysis area.

- 2) Adjacent wildland fuels: Convective and radiant heat energy from a high intensity surface or crown fire can ignite wood structures at distances up to 120 feet. Fuel reduction treatments specifically designed to reduce this kind of risk are most effective when applied within the immediate vicinity of a home or structure (Cohen and Butler 1999).

Fuel reduction treatments proposed for this project are designed to reduce the threat of severe surface and crown fire on NFS lands which in turn should reduce the threat of severe surface and/or crown fires on adjacent private ownerships. Nevertheless, unless similar treatments are initiated and maintained around homes and structures on nearby private ownerships, proposed fuel reduction treatments on NFS ownerships would have little effect reducing this threat to homes and structures within the Hanlon WUI.

- 3) Firebrands: Firebrands are a significant ignition factor within the WUI. Flammable structures and vegetation can ignite and burn from firebrands lofted a half mile or more downwind from a wildland fire (Cohen 1999).

Proposed surface, ladder and crown fuel reduction treatments on NFS ownerships should reduce this potential threat, particularly on those areas that are within ½ mile of proposed treatment units.

*(Page 46 – Hanlon Environmental Assessment, October 2009)*

## **Comment #2 –**

Your cumulative effects analysis fails to even mention that the planned new road construction will generate large amounts of sediment. This is a major violation of the NEPA.

On page 59 of Chapter 3, the Hanlon EA says: “Use of the existing road systems, continued grazing in the riparian areas and recreational use of NFS lands in the analysis area would continue to be a source of sediment in addition to the present level of embeddedness of stream habitat on lower gradient sections of stream in the analysis area. The effects of sediment contribution from these activities on NFS lands, due to the filling of streambed substrate and pools in low gradient segments of the streams, is expected to continue within the analysis area.”

On page 77 of Chapter 3, the Hanlon EA says: “Sediment yield effects from project activities are expected to be recovered within that time period if no new permanent roads are being constructed. If new permanent roads are being constructed, then sediment yield effects from project activities would be permanent. Roads are considered to have sediment yield effects throughout their life (Beschta 1978; Bilby et al. 1989; Burroughs and King, 1989; Elliot and Foltz, 2001).”

Nowhere is there any estimate of the sediment resulting from the planned 3.2 miles of specified road construction and 4.4 miles of temporary road construction! The person doing the effects analysis on fish habitat does not even know that new permanent roads will be constructed with the Hanlon project. Map #4 shows these proposed roads in red.

## **Response:**

Effects to fish habitat are displayed in Chapter 3, pages 53 through 64.

Page 56 displays some of the effects of implementing Alternative A (not implementing any part of the proposed action).

The projects included as part of Alternative B (proposed action) that would affect fish habitat are listed on page 59 where it states: “Fish habitat improvement projects are proposed under this alternative along with fuel, vegetation, and road management projects.” The specific project listed on this page related to road construction is: relocating approximately 3.2 miles of the Middle Branch Le Clerc Road (FR 1935) to an upland area west of its present location, removal and replacement of culverts blocking fish passage, replacement of two culverts with a bridge, and obliteration of the existing riparian road. The effects of implementing these road-related projects are identified on page 59 (The effects of the limited new road

construction in these subwatersheds, within the analysis area, is not expected to imbalance the existing flow regimes, lower summer flows and increase summer water temperatures due to their limited nature and the long-term reduction in overall road density. The effects of the addition of new road construction to the existing drainage network, in watersheds within the analysis area, are countered by the decommissioning of 13.4 miles of existing road.)

Page 60: the effects of the proposed harvest, new road construction, reconstruction, and restoration activities within the analysis area is expected to increase the number and improve the quality of pools in the long-term.

Under this alternative, no activities within the riparian vegetation within the RHCAs of Le Clerc Creek are proposed except for some minor riparian vegetation removal at proposed moderate reconstruction of stream crossings. Road obliteration and the removal of culverts during decommissioning of roads, within the riparian area, may cause a temporary increase in sediment introduction into certain segments of streams within the analysis area. The replacement of culverts, dredging sediment from behind a diversion dam and the placement of instream wood and/or rock structure would all temporarily increase sediment input into streams within the analysis area. Pool habitat would be affected by the actions on federal, state and private lands as these activities would increase the sediment input in the short-term and the level of filling of pools on low gradient sections of streams located downstream of the activities within riparian areas. The action alternative is likely to have a short-term cumulative degrading effect to pool habitat on the lower gradient reaches of Le Clerc Creek within the analysis area for this reason. As well, the proposed introduction of instream structure that would create new pool habitat and improve existing through the action of scouring would also have a beneficial effect on pool habitat in the long-term.

The effects of the proposed harvest and new road construction and reconstruction in this watershed, together with the proposed restoration activities, is expected to increase numbers of instream wood and the ability of the riparian vegetation to contribute large instream woody debris along approximately half the length of the Middle Branch in the future.

Page 61: There is an expected temporary increase in sediment spatially over many years primarily from the some of the proposed restoration activities. This sediment may settle in low gradient channels within Le Clerc Creek. This sediment is also expected to be flushed out during peak flows during the spring of each year. This flushing action would avoid any long-term accumulation of sediment under this alternative that would widen stream channels and increase the bankfull width/depth ratio.

Any direct and indirect sedimentation from riparian road crossing reconstruction and restoration activities is expected to be reduced after the actual proposed activity occurs and sites are revegetated. Any increase in embeddedness is expected to be temporary as the proposed restoration activities would be scheduled so as to allow the streams to flush the introduced sediment through its system, lessening any localized short-term increase in embeddedness.

Page 63: The action is expected to increase the present condition of the watershed in regards to this indicator in the short-term due to some level of increase in sediment input and movement during implementation of the restoration activities. While this is unavoidable, the proposed restoration activities are expected to reduce or eliminate some existing chronic sources of sediment such as segments of FS Road 1935000 and continuing erosion of streambanks at the Diamond City site over the long-term. The net effect is anticipated to decrease the level of sediment in a portion of the watershed that includes the Middle and lower East Branches.

Effects to hydrology are displayed on pages 76 through 79. Page 76 describes the scope of analysis. Effects to hydrologic conditions, as related to sediment, are displayed on page 78 for:

Alternative A - "No Action would result in the greatest long-term negative effects to the values at risk because the road improvements would not occur and timber stand conditions would continue toward conditions that are favorable to stand-replacing wildfire. The effects of which would include increased sediment yield and increased road and culvert failures."; and

Alternative B - There would be an immediate short-term increase in sediment, but an overall reduction in sediment risk and a net decrease in sediment yield in the long-term. The short-term increase is small compared to the long-term reduction in sediment yield and risk of sediment delivery. Beneficial uses would not be impaired by this project. Proposed treatment units have been specifically designed to avoid or reduce the potential for sediment production and delivery. See Chapter 2 for information about design criteria. Road

reconditioning (19.6 miles) would also result in reduced potential for sediment yield and delivery. Prescribed burning activities would not have negative impacts to sediment production and delivery. While some localized sediment production is anticipated from the mechanical slash disposal treatments and site preparation for planting, the untreated vegetation and Riparian Habitat Conservation Areas (RHCAs) between the treatment areas and the streams would help prevent sediment delivery to stream channels.

Cumulative effects are displayed on page 79. Detailed analysis information is displayed in the hydrology and fisheries reports in the Hanlon project file.

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*From Jonathon Isacoff*

**Comment #3 –**

The area of this proposed project provides critical habitat for a host of federally endangered, threatened, and otherwise rare animals. Most noteworthy among these are Grizzly Bear, Gray Wolf, and Lynx, which are Federally Endangered and Threatened respectively. Other rare animals that either currently do or may breed in this habitat include Fisher, Harlequin Duck, Spruce and Dusky Grouse, Northern Goshawk, and Black-backed Woodpecker.

**Response:**

Grizzly bears and Canada lynx are presently listed under the Endangered Species Act of 1973 as threatened species for the Colville National Forest (CNF). On May 4, 2009, the US Fish and Wildlife Service officially removed the northern Rocky Mountains population of gray wolves from the threatened and endangered list.

The US Forest Service (Region 6) lists the gray wolf, fisher and harlequin duck as sensitive species for the CNF. Sensitive species are those whose population viability is a concern because of: significant current or predicted downward trends in numbers of animals, or significant current or predicted downward trends in habitat capability that could reduce a species' existing distribution.

Spruce grouse, blue (dusky) grouse, northern goshawks, and black-backed woodpeckers are listed by the CNF as Management Indicator Species (MIS). Rather than attempt to manage for each of the hundreds of vertebrates on the CNF, the MIS approach singles out representative species for active management and conservation. Habitats provided for each indicator species would in turn support many other animals that require similar habitats. The 14 MIS species or species guilds were selected by the CNF because they; 1) are endangered or threatened with extinction; 2) are believed to be sensitive to the effects of forest management on a major biological community (such as old growth forests); 3) require specialized habitats that could be sensitive to forest management practices, or 4) are species commonly hunted, fished, or trapped.

Effects of the Hanlon project for these species are displayed in Chapter 3 of the EA and in the management indicator report (project file) and biological evaluation (EA appendix D).

**Comment #4 –**

The proposed Hanlon Timber and Fuels Management Projects would simply add to that imbalance and in the process, be another step closer toward the disappearance of our key top carnivores and other rare animals, such as Northern Goshawk and Spruce Grouse -again, this is a whole living ecosystem of rare and diminishing species; it's not just an issue about Grizzlies.

**Response:**

Effects of the Hanlon project to threatened, endangered, and sensitive (TES) species are summarized in Table 9 on pages 69 through 71 in the EA. The table is adapted from the biological evaluation (BE) of project effects to TES species. This table covers all listed species, not just grizzly bear. The US Fish and Wildlife

Service has concurred with the effects determinations for threatened and endangered species disclosed in the BE.

The Hanlon project would move the project area closer to its historic condition with regards to tree species mix, stocking levels, stand structural stages, and fuel loading. Alternative B would reduce the risk of stand replacement fires in the project area. The project as proposed is consistent with CNF Forest Plan standards and guidelines for Management Indicator Species (MIS) (Borysewicz, M. 2009. Hanlon Timber and Fuels Management Project; Effects to Management Indicator Species).

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*From Dan Jones*

**Comment #5 -**

I hope you're not going to close Paupac Rd. Paupac has been groomed for snowmobiles off and on for 30 years (winter Knights). A lot of kids, young families, Veterans like to ride their snowmobiles in the annual Poker run "in our National Forest". It's a multi-use forest.

**Response:**

The Paupac Road (FR 1936) is outside the Hanlon Timber Sale Project Area. Segments of the Middle Branch Le Clerc Creek Road (FR 1935), the Hanlon cut-off Road (FR 1935115), and the West Branch Le Clerc Creek Road (FR 1933) would be haul routes for Forest Service timber sales. These roads would be plowed in certain winters for log hauling. Stimson Lumber Company has plowed FR 1935 in each of the last several winters. No equipment operations related to timber harvest on National Forest System land would occur on the route of the Selkirk Trailblazer's Poker Run during the weekend of the event if the Selkirk Trailblazers continue to utilize this route (Decision Notice, page 5). Whether the Paupac road system will continue to be used for the Poker Run event is not part of the Hanlon analysis.

**Comment #6 -**

Does the Forest service have any programs to encourage youth to get out in our National Forest??

**Response:**

The CNF is one of the biggest summer employers of college students in Pend Oreille, Stevens, and Ferry Counties. In the past several years, the Newport-Sullivan Lake Ranger Districts have hired youth crews from area high schools to complete trail maintenance and other recreation site improvement work. For many area kids, a job on the CNF is their first paid work experience. The CNF hosts fishing festivals, water festivals, nature walks, school talks, and other programs for young people. The forest also uses volunteers of all ages to complete various recreation and habitat improvement projects.

**Comment #7 -**

You've already closed Harvey Creek, Bunchgrass Flats, and Monumental (some of the prettiest country in Pend Oreille County) after they were logged.

**Response:**

The Harvey Creek Road (FR 1935) is open to street-legal motorized vehicles. Bunchgrass Meadows is a Research Natural Area (RNA). RNAs contain examples of typical natural ecosystems or unique kinds of vegetation, animals, and land which are reserved for scientific and educational purposes. Only non-motorized uses are allowed in RNAs. The section of land containing Monumental Mountain is owned by Stimson Lumber Company.

**Comment #8 -**

I started hunting mule deer with my dad up Harvey Creek nearly 50 years ago. I've been snowmobiling Harvey Creek, Bunchgrass Flats and Monumental for 30 years.

**Response:**

Bunchgrass Meadows was closed to motorized use (including snowmobiles) when the Colville National Forest Land and Resource Management Plan was published in 1989. With the exception of open roads, Stimson Lumber Company does not allow snowmobile use on their property, including Monumental Mountain.

Hunting on National Forest System lands is allowed based on Washington State Department of Fish and Game regulations.

Changing motorized use or hunting options in the Harvey Creek, Bunchgrass Meadows or Monumental Mountain areas is not part of the Hanlon analysis.

**Comment #9 -**

Us tax payers paid for all the roads, bridges, reinforced banks (Harvey creek), maintenance, etc. in the area. Diverting the Middle Fork of Le Clerc creek Rd./paupac away from the creek isn't going to solve the silting problem.

**Response:**

Relocating part of the Middle Branch Le Clerc Road away from the creek is not intended to remove all sediment sources to the creek, but to reduce sediment input and help improve the riparian area. As stated in the EA, roads produce and deliver sediment for their duration on the land. It is a contributing factor to the current sediment issues, and would continue to contribute sediment if location and condition is not addressed. Flooding would increase streambank erosion and bedload movement, including silt, when compared to lower flows. The proposed obliteration of the Middle Branch Le Clerc road would, over time, reestablish an area of functioning riparian vegetation within the current imprint of the road. Eventually, it is expected that this vegetation would stabilize the obliterated area (which includes streambank of the Middle Branch), reduce the current rate of erosion and, subsequently, the total amount of silt entering this stream.

**Comment #10 -**

The mouth of LeClerc Creek didn't fill with silt. Starting in the early 80's you heavily logged the east branch and the middle fork.

**Response:**

A majority of the logging in the East and Middle Branch subwatersheds in the 1980s occurred on Plum Creek and other privately-owned lands and not National Forest System lands. Their logging practices have changed since the 1980s due to the riparian protection measures under the Washington State Forest and Fish Rules and requirements under the Endangered Species Act. In addition the harvest systems used on NFS lands has also changed in response to implementation of the Colville National Forest Land and Resource Management Plan and changes in management policies.

**Comment #11 -**

In the spring of 1997 it again flooded, the mouth of Leclerc silted shut!! Poor logging practices caused the LeClerc creek to fill with silt not a few pickups on the middle fork/Paupac Rd .

**Response:**

With the advent of Water Quality Best Management Practices and mitigation measures, the Forest Service no longer logs like we did in the past. The Middle Fork Le Clerc road intersects the riparian area, thus decreasing the effectiveness of a buffer. Roads produce and deliver sediment for their duration on the land. They are a main source of sediment contribution to the streams. The road has altered the hydrologic process

within that sub-basin, in combination with the steep slopes and vegetation removal, it is not surprising that the flood would contribute to the silting of the stream. The spring floods of 1997 did deposit a great amount of silt in the lower gradient sections of Le Clerc Creek although district or forest resource specialists are not aware of any temporary lack of connectivity due to excessive silt at the mouth of this stream. In the 1980s and 1990s, there was a great deal of sediment input from portions of the Middle Branch Le Clerc Road into the Middle Branch of Le Clerc Creek and subsequently the East Branch of Le Clerc Creek below their confluence. This is a cost-share road between the US Forest Service and the Stimson Lumber Company. Due to the fact that it was a native surface road and because of its proximity to the Middle Branch of Le Clerc Creek, it was a perennial source of sediment. In 1999 the Forest Service, in partnership with the Stimson Lumber Company, resurfaced this road and ditchlines with crushed rock. This has dramatically reduced the sediment input from this road into the stream.

**Comment #12 -**

In the spring the west branch runs clear compared to the middle fork/east branch. I hope when you're done with you're fire suppression/ thinning the west branch still runs clear in the spring??

**Response:**

The proposed fire suppression/thinning activities on the West Branch are not expected to increase its turbidity. Riparian vegetation would be protected during implementation to retain buffers between project activities and the stream. The function of the riparian vegetation along the West Branch to stabilize its streambanks and filter any soil movement would not be comprised by these proposed activities.

**Comment #13 -**

You've already taken a big area away from us. Leave Paupac and the west branch open, and provide the campgrounds you promised in 1988 (see attached) to offset the area we've lost. Statement from news release: Resource Forester Jill Strelnik stated “the District will be developing a number of dispersed camp sights in 1988 to mitigate the reduction in the available dispersed sights because of the closures. These will be located near the gates on the 4th of July, Pulp, Cement Bridge and Railroad Roads.”

**Response:**

This project would not change access for the Middle Branch Le Clerc Creek (Paupac; FR 1936) or the West Branch Le Clerc Creek Roads (FR 1933). The Middle Branch Le Clerc Creek Road (FR 1935) would be relocated farther from the creek, but would still provide access through the project area.

The 1987 news release attached to the comment letter refers to “dispersed campsites”, not “campgrounds”. Dispersed campsites are primitive camping spots usually located by the side of a road with enough room to pull a vehicle into and set up a camp. They have none of the amenities of formal campgrounds such as toilets, potable water, picnic tables, etc. The memo refers to dispersed campsites near the gates on the “Fourth of July (FR 1932), Pulp (FR 1934080), Cement Bridge (FR 1934200), and Railroad Roads (FR 1935011)”.

The Hanlon Planning Area currently has about 90 dispersed campsites. Three sites are located along the portion of the Middle Branch Le Clerc Creek Road that would be closed. One site receives a moderate to light level of use, and the other two are only occasionally used as hunter camps. Campers could walk the decommissioned road to access these sites, but it is likely they would be abandoned. However, there are opportunities to develop new dispersed campsites along the relocated section of road.

With regard to the 1987 news release, dispersed campsites are found at or near the start of each of these roads. The following appear to be the dispersed campsites described by Jill Strelnik in 1987. FR 1932 (4th of July) has a couple of dispersed campsites before the gate. When part of CR 3521 was rerouted to a location farther from the East Branch, a large dispersed campsite was retained near the start of FR 1934200 (Cement Bridge). A large, multi-party campsite is located at the beginning of FR 1935011 (Railroad). Although the Pulp Road (FR 1934080) entrance is located on Stimson Lumber Company Land, there are at least 3-5 dispersed campsites located on CNF lands just west of Pulp Road on the East Branch of Le Clerc Creek Road (FR 1934).

The project would also retain and improve campsites in the Yocum Lake and Diamond City/Ball Park areas. Less significant dispersed campsites in and near three other units (3, 26, and 75) would also be retained. The project would, however, eliminate vehicle access to three seldom used dispersed campsites (units 11, 12 and 23).

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*From James Cowan*

**Comment #14 -**

I also have a possible suggestion to immediately alleviate (on a temporary basis) the raised culvert barrier to fish migration upstream of the location of the FR 1935 crossing of the middle branch of Le Clerc Creek (and other raised culvert barriers throughout federal public lands).

The corrugations in the suggested "culvert-flume" would provide some friction to slow down the water a little, and aid in oxygenating the water in the discharge pool due to "mini rapids" caused by the corrugations when the water flow is low and semi-stagnant. The center of the "flume" might need a support to keep the flume from "folding" under heavy water flow, and a brace or rock rip-rap under it might be best. Using the half culvert flume over the rip-rap would also ensure that there would not be a problem with the water coming out of the road culvert and disappearing into the rip-rap, which would then become a fish barrier in itself. It might be necessary to place some large boulders several meters below the foot of the flume discharge to keep the accelerated (storm or spring thaw) water flow from gouging out the stream bottom, as well as preventing a possible unwanted "ox-bowling" attempt at stream-bank erosion by a possible "Coriolis effect" on the flowing water discharge during high water flows.

Let me mention again that this is not a permanent fix, as the pipe section would have a finite life of just maybe five years. The idea is just a temporary cheap "fix" until a replacement bridge or a proper culvert could be installed when future funding is available.

**Response:**

I really appreciate the design proposal by Mr. Cowan. However, the problem with those culverts on FR 1935000 is not just the fact that the culverts are perched and fish may not be able to leap the distance from the downstream water surface to the culvert lip. These culverts are also velocity barriers due to the small diameter of the pipe versus the bankful width of the Middle Branch of Le Clerc Creek. The proposed design only addresses the problem of getting the fish into the perched culverts. The velocity problem would still exist inside the pipes. The velocity within the half pipe design of Mr. Cowan would also be an impediment during high flows as there are no baffles to aid the fish in negotiating the distance along this structure. It looks like it would be a maintenance headache in the spring runoff and any snow load would probably twist and tweak the structure to where it may cause even more problems for the fish, road, and maintenance crew.

Due to unknown future funding options the Hanlon EA proposes to replace the existing culvert problem of fish passage and water velocity with a design that would also meet long-term needs.

**Comment #15 -**

Concerning the rerouting of a portion of FS 1935, It is my opinion that it is unnecessary, and a terrible waste of money and resources. I seriously doubt that the miniscule "pollution" from the rainwater runoff from the gravel road into the creek is "harmful" to fish, bi-valves (clams), crustaceans, aquatic plants, or other organisms inhabiting or utilizing the creek.

**Response:**

Re-routing Forest Road (FR) 1935 would remove five culverts that are presently barriers to fish movement in the Middle Branch of Le Clerc Creek. The relocation would restore/reconnect small wetlands and other riparian habitat that was impacted by the construction of the original road. Once the existing road prism is ripped, conifers would grow within the abandoned road and eventually increase large wood inputs to the creek.

The road would be relocated to an upland area further from the creek. As a result, riparian habitats along the creek could be better utilized by big game animals for foraging or for calving/fawning.

**Comment #16 -**

The real reason for the proposed closure and "realignment" appears to be more of a political "fund and membership-raising-stunt" and a self centered egotistical oriented personal goal of one or more members of the "single use-utopian-wilderness-minded" environmental activists, along with other like minded "communal property control" advocates. It is my opinion that the real intention of the environmental groups "pressured" road closures ("de-Road-ing") and re-routing of the roads is to eventually close off all the roads within the National Forest boundaries east of the Pend Oreille River, making the area "eligible" for wilderness inclusion.

**Response:**

The objectives of the relocation and obliteration of a portion of FS Rd 1935 are as follows:

1. Sediment Reduction - the Middle Branch of Le Clerc Creek contains aquatic habitat of poor complexity and condition. This is primarily due to the high amounts of fine material that fills interstitial spaces within the streambed material that are necessary for good trout spawning habitat and for aquatic insects, an important forage base for the trout in this stream. The fine material also fills pool habitat which serve as spawning, rearing and overwintering habitat for trout. Obliteration and restoration of the riparian area would reduce sources of unnatural amounts of sediment and should improve habitat quality for trout and aquatic insects.
2. Restoration of riparian habitat - Rd 1935000 has eliminated a portion of the historic riparian vegetation by virtue of its location. The Middle Branch of Le Clerc Creek has water temperatures that exceed Washington State water quality standards (16 Degrees C.) each summer. The portion of the road to be obliterated would be seeded and planted with native riparian species to reestablish a riparian area. The reestablishment of riparian vegetation would, over time, provide overhead shading and a gradual reduction of summer water temperatures.

The Forest Service proposed the above restoration activities to meet the objectives of reducing adverse effects to native fish and their habitat and to comply with Washington State water quality standards that are contained within our Forest Plan. It should also be noted that approximately the same amount of new road construction would occur as is proposed to be obliterated in this particular restoration activity. This would continue to provide public access to the overall area and does not lead towards any reclassification of the area for wilderness.

Continued access on open forest roads located east of the Pend Oreille River is required for (but not limited to) the following reasons;

- forest and range management,
- forest fire suppression,
- recreation,
- access to active mining claims,
- access to radio communications sites,
- access to an automated weather station at Bunchgrass Meadows,
- access near the US – Canadian border for the Department of Homeland Security,
- access to state and private in-holdings.

**Comment #17 -**

I can understand the concept of closing a temporary logging road that did not ACTUALLY exist before the logging began, but to close and "de-road" public used access roads on USFS and BLM lands that existed before 1976 is illegal under present legislation and the legal precedents established after the revocation of RS 2477 in 1973 by congress.

**Response:**

Any temporary roads used during implementation of the Hanlon projects are proposed for closure and rehabilitation. Locations proposed for use as temporary roads are not currently drivable and would not be available for public access at any time during or after project activities.

RS 2477 claims can only be adjudicated in federal court. The issue of RS 2477 is beyond the scope of this project.

**Comment #18 -**

As a member of Public Lands For The People (PLP), I, and the organization interpret the legislation passed in 1976, all existing roads and trails on USFS and BLM lands that are used by the public cannot be closed or "de-roaded", I am fully aware that (Nationally) in the past certain administrative staff of the USFS, along with "outsourced" contract labor (such as contract facilitators, etc.) have ignored the RS 2477 rule of law (and open meeting laws) and have defiantly and illegally opted to close access roads within National Forests, either by political pressure, frivolous lawsuits, or for personal ideological gain.

I strongly object to any more "road closures" and so called "de-roading" of roads that existed prior to 1976, and I strongly object to the closure(s) or "re-alignment" of any existing section of FR 1935, or any other roads within the National forest that existed before 1977. I view most of the previous, present and proposed road closures as an unwarranted result of extreme pressure placed upon the USF'S by self serving outspoken "annointed" leaders of radical environmental groups who have bestowed upon themselves self serving beliefs of elitism, and who unfairly litigate their influence of environmental policy making upon the USFS, without any regard to the actual desires and political rights of the local populations that live within the effected geographical areas.

**Response:**

The Colville National Forest closes roads built for timber sales for a number of reasons including:

- To decrease road maintenance costs (the forest is funded to maintain only a fraction of all existing roads);
- To reduce impacts to ground and surface waters, as well as protect other resources; and
- To maintain open and total road densities for wildlife security (ex. elk, grizzly bears).

With the exception of segments of FR 1900096 (Yocum Lake) and FR 1935 (Middle Branch Le Clerc road) roads proposed for closure under the Hanlon EA are currently not open to public access. They are either overgrown with vegetation and/or restricted from motorized use.

Segments of FR 1935 would be relocated to move the road further from the Middle Branch Le Clerc stream. Access through the project area in the same general area would be maintained.

A segment of FR 1900096 is proposed for closure and conversion to a non-motorized trail. Motorized access to Yocum Lake would be retained via the County Road which accesses the south end of Yocum Lake.

Road management activities proposed under the Hanlon EA would have very limited impact on motorized access through the Le Clerc watershed.

The issue of RS 2477 is beyond the scope of this project.

**Comment #19 -**

Concerning the restoration of the original flora in riparian areas and in the proposed upland areas, I also support that concept as written up in "Alternative B". Large stands of mature aspen trees appear to be lacking in much of the proposed aspen restoration areas, whereas in other similar National Forests in Idaho and Montana with similar soils, terrain, precipitation, and elevation, there appears to be a more natural and healthy aspen tree population.

With the unsound industrialized logging practices of the early 20<sup>th</sup> century, coupled with overgrazing and total fire suppression, the dormant aspen root systems are in danger of dying out due to their inability to regenerate

above ground and produce the necessary mast of food producing leaves, as long as a mature evergreen forest exists for an unnaturally extended period of time. Natural forest fires remove the evergreen over-storey, allowing the dormant aspen roots to regenerate a new aspen grove, even after 100 years of dormancy.

The bottom line is that a huge uncontrolled forest fire in the present is undesirable (understatement), so a human mechanical thinning of the evergreen over-story is necessary, along with a controlled prescription burning of the desired aspen regeneration areas, to maintain a nearly natural forest health. The proposed regeneration of the aspens will also enhance, and even help the native ungulate populations of moose, elk, deer, and possibly caribou to better flourish, due to the increased availability of aspen (and other complimentary shrubs) twigs, buds, and leaves for a natural food source (also, a semi-open forest floor can produce thick clumps of lichen, which caribou eat. Also, aspen bark is a major and preferred source of food as well as a dam building source for beavers, animals that will improve the long-term quality and supply of creek water and provide improved fish habitat.

**Response:**

Proposed activities are designed to promote the establishment of both fire tolerant conifers and hardwoods, including aspen. Prescribed fire is planned for those areas with one or more of the following attributes:

- 1) High hardwood component (birch, aspen, willow, red stem ceanothus);
- 2) High percentage of fire tolerant conifers (western larch, ponderosa pine and Douglas-fir over 12" diameter breast height); and
- 3) Relatively low risk of escaped fire onto neighboring private property, structures, and/or other sensitive features such as archaeological sites and plantations.

Existing aspen trees are likely to benefit from timber harvest and prescribed burning proposed with the Hanlon project. The project should reduce conifer competition and increase sunlight warming the ground, which would set the stage for aspen to sprout from underground root systems. Aspen regeneration may need to be protected from over-use by livestock in some areas.

**Comment #20 -**

The Yocum Lake roads and the camping arrangements should remain the same as now, with some improvements to the roads and the camp sites, if needed. Again, I am opposed to the concept of "over-controlling" the general public on public lands.

**Response:**

Uncontrolled recreation is a problem throughout the National Forest System, and it is a problem here on the Colville National Forest. High-use recreation areas are causing resource damage – compaction, erosion, and damage to surrounding vegetation. The campsites surrounding Yocum Lake are no exception. As you can see from these photos, some of the sites around Yocum Lake are eroding and silting the lake. Vehicles driving right down to the shoreline to launch boats are a main problem.

To address these problems the district is planning to limit vehicle access, modify some campsites to prevent shoreline erosion, rehabilitate the disturbed shoreline, and plant riparian vegetation. Since part of the purpose and need is to improve riparian conditions, this suite of actions seems to be a reasonable part of this project.





The Hanlon project would close a section of FR 1900096 which accesses the north side of Yocum Lake. This road is in poor shape, is costly to maintain, and is not needed for public access to the lake, due to the county road at the south end of the lake. The road is steep and eroding badly in some places.

Pend Oreille County has obtained the road leading to the south end of the lake, and some land along the lake. The forest has been working with Pend Oreille County to develop recreation facilities at the south end of the lake, and to construct a road from the County Road at the south end to some of the forest's dispersed campsites. A small loop road with parking slots and five associated campsites would be constructed on the west side of the lake. These defined campsites would replace the existing, user-created sites, and roads in the same location. A pre-fabricated cement CXT toilet would be installed near the site. The intent of these projects would be to better define recreational use of the lake, improve sanitation, and make the site more family-friendly. A single access road (as opposed to the two existing roads) would reduce road maintenance costs as well as assist law-enforcement efforts in the basin. If these improvements work as intended, recreational use of the lake would become more focused on fishing and camping and less on motorized uses and shooting.

### Comment #21 -

The greatest objection that I have to your "Environmental Assessment (of) Hanlon Timber and Fuels Management Projects for the Sullivan Lake Ranger Districts is that the very title is misleading.

Buried within the text is a whole range of other important issues, such as campground closures and destruction by the USFS, extensive road closures, and blocking existing public access to public lands and lakes.

### Response:

A list of proposed projects was included in the letter sent to the public on October 14, 2008, and in the letter sent to the public at the start of the 30-day comment period (October 13, 2009). Road construction, reconstruction and closure were also listed in the legal notice at the start of the 30-day comment period. The Hanlon project would relocate two road segments (FR 1935) and close part of one other road (FR 1900096). Closing part of FR 1900096 would not block public access to Yocum Lake, since the county road to the lake would remain open. The project would not reduce the existing number of dispersed campsites. There are no proposals to close campgrounds under the Hanlon EA.

**Comment #22 -**

These issues should have been separated from the Hanlon Timber and Fuels Management Projects, and have been a separate assessment issue altogether. The way that this was done has all the appearance that this was a deliberate move to "sneak the closures past the public".

**Response:**

The projects analyzed as part of the Hanlon proposed action are listed in Chapter 1 (pages 4-6) and Chapter 2 (Alternative B, pages 20-21). The effects of the above actions have been fully disclosed to the public in Chapter 3 of the Hanlon Environmental Assessment as part of Alternative B.

These types of activities have often been part of vegetation management EAs. The road closures proposed do not close system roads available for legal motorized access and do not close any present access to current recreational use except the NFS access to Yocum Lake. However, access to dispersed campsites and Yocum Lake would still be available via a county road that connects to the south end of the lake.

Also see response to Comment #21.

**Comment #23 -**

Also, I want the USFS to extend the public comment periods to ninety (90) days on projects like these. Thirty days comment periods are just suited for Environmental groups who can assign sections of the "Environmental Assessment" to "committee" groups and individuals for dissection, analysis, evaluation, and comment. However, for individual citizens who depend on working for a living, thirty days is too short a time to properly read, assess, formulate an opinion, possibly visit the proposed site, make evaluations, and provide a written reply.

**Response:**

The opportunity for public participation, review and comment on the Hanlon project started during the scoping period (letters were sent to the public August 8, 2008) and continued through the public meetings (8/28/08 and 10/28/08) and project analysis period before concluding with the 30-day comment period. The district ranger incorporated comments received during the entire analysis timeframe into project development.

The comment period required by 36 CFR 215 is 30 days as shown in these excerpts.

**§ 215.2 Definitions.** *Comment period*—The 30-calendar-day period following publication of the legal notice in the newspaper of record of a proposed action, during which the public has the opportunity to provide comments to a Responsible Official on a proposed action subject to this part, except for projects requiring an EIS which follow CEQ procedures for notice and comment (40 CFR parts 1503 and 1506.10; FSH 1909.15, Chapter 20). The time period is computed using calendar days, including Saturdays, Sundays, and Federal holidays. However, when the time period expires on a Saturday, Sunday, or Federal holiday, comments shall be accepted until the end of the next Federal working day.

**§ 215.6 Comments on proposed actions.**

(a) *Opportunity to comment*—(1) *Time period for submission of comments.* (i) *Environmental Assessment.*

Comments on the proposed action shall be accepted for 30 days following the date of publication of the legal notice.

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*From Vern Moore*

**Comment #24 –**

I agree with your assessment of the need for this project. I think you and your crews do an excellent job of supervising our forest lands and re-prod of our lands.

I do not agree with closing roads at the completion of projects. I think there is a missed opportunity to display your hard work by closing roads so the public cannot visually see your commitment and excellent work. As the

saying goes, "a picture (visual) is worth a thousand words." Take advantage of this to display your performance.

**Response:**

The Colville National Forest closes roads built for timber sales for a number of reasons including:

- To decrease road maintenance costs (the forest is funded to maintain only a fraction of all existing roads);
- To reduce impacts to ground and surface waters, as well as protect other resources; and
- To maintain open and total road densities for wildlife security (ex. elk, grizzly bears).

There would be many timber harvest units located along open roads that would be visible to the public.

**Comment #25 –**

By 'public' I mean a group of people who are over 60 years of age, the people who vote more than other age groups; also, people with physical handicaps like myself.

**Response:**

The Colville National Forest contains hundreds of miles of roads, highways, and motorized trails that are open to public travel. The forest maintains at least two road systems for disabled hunters in each of the three northeastern WA counties. These roads are closed to able-bodied hunters but open to any disabled hunter registered with the state. More routes for disabled hunters will be added in future years. The Hanlon project would not reduce access to lakes or significant dispersed campsites.

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*From Jere and Ann Dennis*

**Comment #26 –**

As permittees with a grazing allotment on LeClerc Creek we are writing with concerns we have over this project. There seems to be some inconsistencies in the road relocation on the MiddleBranch. We were told that the road would leave the existing road before it got to the East Branch 'Y' and go across the Stimson property in Section 29 and join up to the Hanlon Cut off road. Then travel up the Hanlon Mt. Road a short distance and where the new road would be constructed on up the W. side of the creek meeting up with the now existing middle branch road 1935. Your map # B-4 shows the road being constructed from the E. Branch road across the creek and then north along the hillside and back on the flat north of the cattle guard on to Hanlon Station camp area. How do you plan to access the Hanlon Cutoff road? We understood those culverts were coming out. This cutoff road and the access to the Dry Canyon unit as well as the Hanlon Area are essential to our management of our range.

**Response:**

The lower portion of the Middle Branch Road had two possible locations proposed at the start of the analysis, with final location dependent on agreement with other affected landowners. Agreement to use the west side of the creek was not reached with other landowners, so the Forest Service and other landowners are moving forward with the location proposed to the east of the existing road. The new road would meet the existing road approximately at the junction with the Hanlon cut-off road and provide access both up the new Middle Branch Road location and to the Hanlon cut-off road.

The twin culverts location at the beginning of the Hanlon cut-off would be removed and replaced with a bridge. The third culvert (immediately north of the twin culverts) is thought to be used for overflow, but would need field review to see if it needs replacement or any other work tied to fish passage.

The bridge at the west end of the cut-off road would stay in place with reduced weight limit. There is no funding at this time to repair or replace this particular bridge, but it would need review in the future to ensure public safety.

Road work adjacent to, or in, streams would occur between July 1 and August 31 to meet state hydraulic

permit application requirements. A temporary route would be provided while bridge or culvert work was occurring which would allow public access including access for the permittees to manage their cattle.

**Comment #27 –**

We request that the existing road north of the Hanlon campground be left intact to the upper (east gate) into our cattle holding pen. We further request when the road on up the creek is destroyed (decommissioned) and planted that a useable trail be left to help us manage the cattle.

**Response:**

The east gate to the holding pen is north of a culvert originally planned for removal (it is a blockage to fish passage). It would be possible to replace the culvert, but the Forest Service would need additional time for designing the structure. Additional time needed for design work would go past the June 1<sup>st</sup> deadline set for requesting funding.

Access to the south half of the pen is already planned to be maintained through leaving a section of the existing road up to the culvert. Some other way to retain access to the pen would be needed once the culvert is removed. The proposal is to expand the holding pen to the south, which would add approximately 1.5 acres of already open land which already has appropriate forage and provide needed access for gathering and moving the cattle.

The proposed road obliteration on segments of the Middle Branch Le Clerc Road would occur south of the junction of the Hanlon cut-off road and the 1935000 road and also occur north of the gate. The whole reason for not obliterating the section of road in between these two points is to give the permittees access to grazing and staging for their cows.

**Comment #28 - (from 11/19/2009 meeting with permittees to clarify the issues in their comment letter)**

Is there an expectation that the cattle will be managed to keep them totally off the rehabilitated portion of the Middle Branch Road?

**Response:**

The road would be obliterated at the ends of the closed road segments to prevent motorized access, and the center segments would be ripped, seeded and planted to help establish vegetation and stabilize soils. Forest Service employees and others involved with the project understand that, due to past use of the area and habits formed by the cows, cattle would meander along areas used in the past, and they would use the area along the Middle Branch stream. Part of the design for rehabilitation would include expectations that cattle would use traditional crossings, which may mean using hardened crossing, geoweb material, or other methods to protect the stream banks and streambeds. However, the existing road surface would not be maintained at a level which permits motorized use or developed as a formal trail.

**Comment #29 –**

In map B-6 we see you are planning to decommission the 1935-105 trail up the E. side of the West Branch. This trail, which once was a road, is already blocked and is showing no signs of use other than foot, cattle and horse traffic. We would request, in fact beg, that you leave it that way. It is our main trail in and out of the Mineral Creek unit and the only way to get cattle out if they go down to the bottom of that unit. Destroying that trail would cause great hardship in accessing the cattle especially if there were a fire in the area.

**Response:**

This trail goes up into core grizzly bear habitat, and the Forest Service needs to prevent motorized traffic in this area. The Hanlon project would remove the trail from the forest transportation system which still lists it as a road even though it is not currently drivable. Mike Borysewicz, District Wildlife Biologist, plans to block the entrance to the road and possibly other areas along the road such that animals could get through, but it would not permit OHV access.

If evidence of OHV or other motorized use is found on the road prism during future monitoring efforts, the district wildlife biologist would redesign the closures to improve effectiveness.

**Comment #30 –**

We do not know where you are planning 'exclosures'. We feel there are quite enough as it is now. Those you have are poorly managed and in disrepair and were done without much thought as to management. More exclosures would only add to that mess. Some are so large there was never a need to take that much useable pasture grazing away from the permitted use.

**Response:**

The intention would be to first improve the effectiveness of existing livestock exclosures; particularly the log structures built along the Middle Branch of Le Clerc Creek. The Newport-Sullivan Lake Ranger Districts experimented with log worm fence and slash fence designs on that creek, and took away valuable lessons. Because the creek lies so close to Forest Road (FR) 1935, construction and maintenance of the exclosures on the creek is difficult. Nonetheless, riparian vegetation on the creek is responding and becoming more robust and diverse over time. This is particularly true of the wire exclosure on the creek near FR 1935010, which was built in cooperation with the Kalispel Tribe.

The existing exclosures do take away useable pasture but they also protect wetlands and streamside riparian zones. There are limited opportunities for new riparian exclosures on National Forest System lands in the allotment. The district would work with the allotment permittee on the citing of any new structures in the allotment. The district might wait until FR 1935 is relocated to fully reconstruct the existing log structures on the Middle Branch of Le Clerc Creek.

It should be noted that the Newport-Sullivan Lake Ranger District has taken steps to improve forage resources in the Le Clerc Allotment in recent years. These have included cutting down and piling small conifers encroaching into Fourth of July Meadows (piles will be burned next year), and spraying herbicides on noxious weeds within meadows and on roadsides.

Projects proposed under the Hanlon EA would create openings in the forest canopy where shelterwood harvest occurs. Transitory forage could be created in these openings, particularly where broadcast burning occurs. Some burned units are likely to be forage seeded for big game.

**Comment #31 –**

Could the culvert on Sec 16 be left in place? It makes an excellent cattle way over the creek instead of through the creek. As large as it is I can not see it hindering the fish passage.

**Response:**

The culvert in Section 16 is a blockage to fish passage and is currently proposed for removal as part of the relocation of segments of the Middle Branch Le Clerc Road (FR 1935000). The Forest Service would need to design appropriate stream protection (e.g., hardened crossing, installation of geoweb material, etc.) at the location of the culvert to maintain it as an area that could be used by cattle for crossing the stream.

**Comment #32 –**

We are also requesting notification of all scheduling of road work on this unit, as it can greatly impact our operation.

**Response:**

Requirements currently listed in the EA to be included during implementation of these projects include protecting existing improvements (EA page 34) and notifying the permittees prior to start of project activities (Decision Notice, page 5). These requirements would be included in any contracts utilized for implementing these projects. The district range management specialist will be the liaison between the Forest Service and permittees to ensure notifications occur in a timely manner.

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*From the Kalispel Tribe*

**Comment #33 -**

Page 19 and 20 – As a result of livestock grazing, the building of enclosures seems to be a common theme throughout the EA. We have concerns with enclosures being used to fence out creeks, aspen stands, post harvest regeneration, etc. We are unclear as to long-term project benefits as long as cattle's grazing continues within the project area. It appears that most of the objectives in the project area could be negatively impacted by cattle grazing. The EA fails to address the reality of what the accomplished goals within the project area will be outside of improving habitat and forest health. The EA needs to be clear that any and all habitat enhancement projects, post harvest tree plantings, stream rehab projects, etc... are going to be negatively impacted by livestock.

Objective 5 page 22. We feel that more discussion needs to be added for each project specified in this paragraph regarding the challenge of implementing each project and the impacts of livestock grazing.

**Response:**

Discontinuing grazing in the Le Clerc Allotment is beyond the scope of the Hanlon Timber Sale Environmental Assessment (EA). Continued cattle grazing has the potential to reduce the extent to which some of the Hanlon project objectives would be met, such as improving riparian and terrestrial habitat conditions. However, the timber sale and associated habitat improvement work should still move the project area closer to meeting the objectives listed on pages 21-23 of the EA.

Vegetation management projects covered under the Hanlon EA would incorporate the management of Riparian Habitat Conservation Areas (RHCAs) along streams in the grazing allotment. Sections of fish-bearing streams would also be managed as travel corridors for furbearers and other wildlife per direction in the Eastside Screens for Timber Sales (Lowe, 1995). These project design criteria would ensure that forest cover is maintained along streams. As a result, cattle should not have significantly improved access to creeks in the allotment.

The Hanlon EA proposes in-stream work such as installing large wood in streams where it is lacking. These habitat improvements should act to impede livestock movement through stream corridors. Any additional riparian exclosures would further impede cattle access to streams and streamside habitats. Shelterwood harvest, broadcast burning, forage seeding, and meadow maintenance proposed under the Hanlon EA could enhance forage resources for livestock in upland areas. This could potentially lead to improved distribution of animals and fewer impacts to riparian areas. Livestock grazing should have no impact on other habitat improvement projects proposed such as snag creation, improvements of road closures, or the installation of food storage containers at dispersed campsites.

Continued grazing in the allotment should have no affect on the Hanlon EA objective of reducing hazardous fuels in the area. Grazing in the allotment has not impacted the ability of the Colville National Forest (CNF) to regenerate conifers in the area. To date, the CNF has not had to exclude cattle from plantations in the area in order to protect young trees from browsing or trampling damage.

"Any and all" habitat enhancement projects are not expected to be negatively impacted by livestock. Some areas of proposed restoration presently are not grazed by livestock, and this is not expected to change in the future. Some restored areas, however, may be impacted, but the impact is not expected to be extensive or to prevent success of the restoration work.

The list of aquatic and riparian restoration projects in the Hanlon analysis area do not initially include fencing. The restoration/enhancement projects include a monitoring strategy to help ensure that these improvements would be protected. If issues arise that may negatively affect the restoration/enhancement project, then the monitoring should show that and the district would implement corrective measures, hence adaptive management. If monitoring indicates that cattle grazing is impeding or negatively impacting the restoration process, fencing is likely to be installed to reduce or prevent this effect. For example, if livestock continue to use and damage riparian vegetation and streambanks along and within the obliterated sections of

the Middle Branch road, the use of drift or other type of fencing would be used (funding permitting) to prevent access to those areas.

**Comment #34 -**

Page 62. The fourth paragraph needs to address the challenges of rehabilitating 3.2 miles of the Middle Branch and continued impacts of livestock in the stream.

**Response:**

Where timber harvest and fuel treatment would occur within the RHCAs of streams in the analysis area, a portion of the riparian area immediately adjacent to the streams will be left undisturbed. These activities are not expected to increase livestock grazing damage to the stream. The restoration activities in the RHCAs of streams are not expected to improve livestock access except in very limited situations. An example would be if some riparian vegetation would be removed to provide access for machinery to place some instream structure to improve stream habitat. Each entry would be as small as possible. Any ground disturbance, at an entry point, would be seeded and slash placed within the access area to deter future livestock access. Fencing is always an option if these actions fail. Monitoring of these projects by the fisheries biologist, hydrologist and range management specialist will occur for several years after implementation to determine effectiveness and need for additional work. If undesirable impacts from cattle are observed, additional work will occur to exclude cattle from the restoration project area.

**Comment #35 -**

Page 20, 40, 46. Managing aspen stands with fire needs to be added to the EA. There is proposed thinning of conifer species in aspen stands, but there is plenty of research where fire has been used to regenerate aspen stands. Page 46 would be the appropriate place to discuss in detail how fire could or would be used to manage some or all these stands.

**Response:**

Managing aspen stands with fire was analyzed as part of the Hanlon projects but was not displayed on the EA pages referenced in this comment. A statement regarding the use of fire to promote aspen regeneration will be added to the decision notice to clarify methods proposed for promoting aspen in the Hanlon area. The EA addresses the use of fire to manage aspen stands at the following locations:

Chapter 3, pages 43-44, which lists one of the objectives for prescribed fire as “Stimulate the growth of hardwood species on which wildlife depend, such as aspen, birch and redstem ceanothus.”

Appendix A – Silviculture Report, page A-24 – “Alternative B allows the opportunity to release aspen trees and clones which are being suppressed by conifers. If the area to be released is expanded to 1-2 tree lengths beyond the outermost aspen trees, then the probability that some aspen regeneration would occur is increased. Additional disturbance such as underburning would most likely further the reproductive response.”

Page A-31 (in a discussion regarding underburning) - “a benefit of underburning would be to make browse species more palatable to big game by stimulating new sprouts. Underburning also would help to regenerate hardwood species, such as aspen and birch through sprouting.”

Appendix D page D-7 Paper birch and aspen occur in small patches throughout the area. These trees have a relatively short life span and are now reaching maturity. In many cases they are being shaded out by growing conifers. Disturbances such as wildfire can reverse this trend by removing conifer cover and the above-ground portion of the hardwood trees. The aspen and birch can then re-sprout from intact, underground root systems.

**Comment #36 -**

Page 21, 28-31, 55. The BMP’s for Fish Barrier evaluation and culvert replacement need to be updated. The Forest and Fish Rules (FFR) address manmade barriers under the Road Maintenance and Abandonment Plan

(RMAP) and if we understand the law correctly RMAPs also applies to the USFS where manmade fish barriers are supposed to be identified and replaced by 2016. We know that local Industrial landowners are on schedule for having their blockages replaced, but I see nothing in this plan for the Hanlon Meadows area or the CNF overall. Page 106 states there are 80.0 miles of existing roads in the analysis area but in the list of BMP's starting on page 28 there is nothing specific to FFR and RMAP's and we believe these need to be added.

**Response:**

Washington State forest management laws require most private forest landowners to prepare and submit a Road Maintenance and Abandonment Plan (RMAP). An RMAP is a forest road inventory and schedule for any repair work that is needed to bring roads up to state standards. An RMAP is prepared by the landowner and approved by DNR. All large (industrial) forest landowners are required to submit an RMAP. Only some small forest landowners are required to submit an RMAP. The Forest Service is not required to prepare and submit RMAPs.

However, the Memorandum of Agreement (MOA) with Washington Department of Ecology (WDOE) does require us to replace or remove all USFS crossing barriers in order to provide fish passage by 2016. It does not, however, require a list or prioritization of when these crossing structures will be replaced within this time period. The forest included activities to be completed within 15 years in the MOA, but these did not include the replacement of all impassable culverts. These activities are listed in the MOA under Attachment A as follows (the work in Le Clerc Creek was completed a while ago):

Colville National Forest

1. *Lone Deer Cr. watershed* - closure of 29 miles of system and non-system roads. Closure involves obliteration at ends of road segments, pulling culverts, reestablishment of channel drainage, pulling back and revegetating oversteepened cutslopes, ripping and revegetation of the road surface and placement of slash on fill slopes. Reconstruction of 7 miles of existing roads which includes rocking and improving drainage. Removal of cattle trough from riparian area to upland site.
2. *Deemer Cr. watershed* - rocking of eroding drainage dips on 0.5 miles of formerly closed road.
3. *Le Clerc Cr. watershed* - approximately 2.5 miles of road relocated out of riparian area. Existing bypassed segment will be rehabilitated over the next two years. The removal of 2 culverts, reestablishment of the channel and revegetation of problem cut and fill slopes will be completed by December 2000. In addition, 2 existing cattle stream crossings will be armored and several miles of worm and barbed-wire fence will be built to protect overutilized streambanks and riparian vegetation.
4. *Sullivan Cr. watershed* - existing toilets within the riparian area to be moved to upland sites.
5. *Lambert Cr. watershed* - to repair earlier flood damage, structures will be placed instream to move channel away from a very erosive slope and roadbed.
6. *S. Fork Mill Cr. watershed* - armoring of existing cattle stream crossings and riparian fencing to protect overutilized streambanks and riparian vegetation.
7. *Tonata Cr. watershed* - closure of 19 miles of system and non-system roads. Closure involves obliteration at ends of road segments, pulling culverts, reestablishment of channel drainage, pulling back and revegetating oversteepened cutslopes, ripping and revegetation of the road surface and placement of slash on fill slopes. Reconstruction of 28 miles of existing roads which includes rocking and improving drainage.
8. *Half Moon Cr.* - install grade control structures on inlet to Half Moon Lake to reduce head cutting.
9. *S. Fork Sherman Cr. watershed* - tree seedlings planted in riparian areas to increase shading and reduce high summer water temperatures.
10. *Sherman Cr. watershed* - replacement of flood damaged bridge with new structure. Revegetation of flood damaged streambanks.
11. *Byers Cr. watershed* - fencing of riparian areas to protect overutilized streambanks and riparian vegetation.
12. *Nancy Cr. watershed* - continuation of gabion construction and revegetation of cutslopes to avoid soil movement from road prism into the stream.

13. *Bracken Cr. watershed* - revegetation of cut and fill slopes damaged by past flooding.

MOA compliance language states:

On an annual basis, Ecology will evaluate Forest Service completion of the planning, activities, and milestones described in Attachment A. The process for making this determination will be as follows:

- A. April 1: USFS MOA Responsible Official will submit an annual forest report that includes proposed road project and accomplishment to the Ecology MOA Responsible Official with a copy sent to respective Ecology regional offices. This report will describe completion of the activities and milestones defined in Attachment A for that particular year. The report will also include a proposal for the Section III activities and milestones for the upcoming two years.
- B. May: Annual Meeting will be held during the month of May to discuss accomplishment of the Section III activities for the previous year, the upcoming two years of Section III activities and milestones, Clean Water Act (CWA) activities, and other Annual Meeting topics as described in the MOA.
- C. June 15: The Ecology MOA Responsible Official will send a written compliance determination and a discussion of CWA activities to the USFS MOA Responsible Official, based upon field review and/or evaluation of activities implemented to meet WAC 222 and other CWA requirements.

June 30: The USFS and Ecology MOA Responsible Officials will agree in writing with the Section III activities and milestones for the upcoming two years.

**Comment #37 -**

Page 78. How many manmade fish blockages within the WBLC’s 60-crossings, EBLC’s 104-crossings? This should also be addressed within the EA.

**Response:**

Based on road survey information there are eight crossings on the East Branch Le Clerc Creek and five crossing on the West Branch Le Clerc Creek that were identified as blocking fish passage. All thirteen crossings are being addressed as shown in the following table. Those blockages not addressed in the Hanlon EA are located outside the Hanlon project area.

Drainage	Route Number	Comment
East Branch Le Clerc	1935011 (MP <sup>1</sup> 1.36)	to be addressed in the Le Clerc Watershed Action Plan – funding permitting
	1935011 (MP 2.24)	to be addressed in the Le Clerc Watershed Action Plan – funding permitting
	1935000 (MP 24.84)	addressed in the Hanlon EA; tentative removal in CY 2013
	1935000 (MP 24.01)	addressed in the Hanlon EA; tentative removal in CY 2013
	1935000 (MP 23.32)	addressed in the Hanlon EA; tentative removal in CY 2013
	1935115 (MP 0.02)	addressed in the Hanlon EA; tentative removal in CY 2012

<sup>1</sup> Mile point

Drainage	Route Number	Comment
	1935115 (MP 0.022)	addressed in the Hanlon EA; tentative removal in CY 2012
	1935000 (MP 25.7)	to be replaced by Pend Oreille County in CY 2010
West Branch Le Clerc	1936000 (MP 17.766)	was replaced in CY 2008
	1936000 (MP 17.767)	was replaced in CY 2008
	1935000 (MP 17.70)	to be addressed in the Le Clerc Watershed Action Plan – funding permitting
	1935000 (MP15.50)	to be addressed in the Le Clerc Watershed Action Plan – funding permitting
	1935000 (MP 15.70)	to be addressed in the Le Clerc Watershed Action Plan – funding permitting

**Comment #38 -**

Page 28-31. Sediment delivery BMPs also need to be updated with the requirements of the FFR where applicable. PR-18, page 30 mentions road maintenance, but the BMPs need to be updated to meet or exceed the FFR’s. The Hydrology section starting on page 77 needs to identify where there are sediment delivery problems from roads (if any) and how they are going to be addressed? In addition, how will increased management activities increase the possibility of sediment delivery in these areas and how will new sediment delivery issues be addressed?

**Response:**

Sediment is discussed in the Hanlon Hydrology Report. A summary of effects is shown on page 4 of the report:

Sediment Yield – There would be an immediate short-term increase in sediment, but an overall reduction in sediment risk and a net decrease in sediment yield in the long-term. This includes the West Branch Diversion Dam Sediment Reduction Project, the Hanlon Meadows Riparian Protection Project, and the Diamond City Stream Channel Restoration Project. The short-term increase is small compared to the long-term reduction in sediment yield and risk of sediment delivery. Beneficial uses would not be impaired by this project. Proposed treatment units have been specifically designed to avoid or reduce the potential for sediment production and delivery. See Chapter 2 for information about design criteria. Road reconditioning (19.6 miles) would also result in reduced potential for sediment yield and delivery. Prescribed burning activities would not have negative impacts to sediment production and delivery. While some localized sediment production is anticipated from the mechanical slash disposal treatments and site preparation for planting, the untreated vegetation and Riparian Habitat Conservation Areas (RHCA) between the treatment areas and the streams would help prevent sediment delivery to stream channels. Anticipated effects of the work on Road 1935000 (the longest road length to be decommissioned-3.2 miles), is predicted to be within the capabilities of the East Branch Le Clerc Creek watershed.

More detailed information specific to alternatives analyzed in detail is discussed on pages 13-15 (Alternative A) and pages 16-24 (Alternative B). The sediment delivery BMPs are updated and displayed in the EA, Appendix E. The Hanlon Hydrology Report describes sediment delivery problems in a thorough but general manner and where they are most likely to occur, and how they would be addressed when found/identified. The report addresses roads under watershed condition (road density) and sediment erosion sections. Increased management activities and their effects are explained in environmental consequences - sediment erosion section. It also explains how the issues are address (mitigation measures, BMPs, etc.)

Best Management Practices are described in more detail in Appendix E and in the Hydrology Appendix H.12 - Best Management Practices. BMPs for roads and trails are specifically addressed under section 15 – Roads and Trails (#15.02 – 15.25).

**Comment #39 -**

Page 58. Forest and Fish Rules needs to be capitalized.

**Response:**

This error has been corrected in the EA.

**Comment #40 -**

Page 80. Are there TMDL's developed for the different branches of Leclerc Creek in the project area? If so where is this information and how will the different Objectives influence them.

**Response:**

There is one TMDL for the entire Colville National Forest that covers all bodies of waters listed. So, no, there are no TMDLs developed for the individual branches of Le Clerc Creek. There is one TMDL developed for all water listed on the CNF, which include Le Clerc Creek, West Branch Le Clerc Creek, East Branch Le Clerc Creek, Middle Branch Le Clerc Creek and Fourth of July Creek. (as well as the Pend Oreille River). The information is in the complete Hydrology Report – Existing Condition (under water quality section) and in the Hydrology Appendix H.2. The influences of the different objectives are discussed in Hydrology Report – Environmental Consequences under the water quality sections.

**Comment #41 -**

Page 102. The Grazing and Fuels Treatments section contradicts itself. We believe the latter statement is probably the correct one. As logging occurs in the denser forest stands adjacent to streams you're going to open access up to livestock thus increasing livestock damage to streams. Further it states on page 103 that 2.5 miles of natural barrier will be removed and may need to be replaced by fences.

**Response:**

Where timber harvest and fuel treatment would occur within the RHCAs of stream in the analysis area, a portion of the riparian area immediately adjacent to the streams will be left undisturbed. These activities are not expected to increase livestock grazing damage to the stream. The restoration activities in the RHCAs of streams are not expected to improve livestock access except in very limited situations. An example would be if some riparian vegetation would be removed to provide access for machinery to place some instream structure to improve stream habitat. Each entry would be as small as possible. Any ground disturbance, at an entry point, would be seeded and slash placed within the access area to deter future livestock access. Fencing is always an option if these actions fail.

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*From Patrick V. Buckley, Pend Oreille County PUD*

**Comment #42 -**

We are concerned about negative impacts your proposed new road building and logging / burning activities may have on riparian habitat and water quality of LeClerc Creek. Last year, the Public Utility District of Pend Oreille County (District) began a twenty five year, multi-million dollar program to rehabilitate 8 streams in the Pend Oreille County. LeClerc Creek is one of these streams identified in the Districts federally mandated FERC 2042 license to be improved for bull trout and westslope cutthroat. We are working with a multi-agency and Tribal group to make improvements to the riparian / fisheries habitat in these streams. It our concern that a well intentioned project by the Forest Service ...such as forest fuel reduction which may remove future stream side shade trees...may impact one of the Districts nearby stream improvement projects.

Our multi -agency Fisheries Sub- Committee is represented by the Kalispell Tribe, the Forest Service, the US Fish and Wildlife Service, WA Dept of Fish and Wildlife and others and while we often have mutual goals it is conceivable that your proposed activities could have deleterious impacts on our existing or proposed projects.

**Response:**

Effects to riparian habitat, fisheries habitat and water quality were displayed in the fisheries report, fish biological evaluation, hydrology report and wildlife biological evaluation. The BMPs and design requirements listed in each of those reports were incorporated into the EA and would become part of project implementation. Monitoring the effectiveness of BMPs and design requirements, and addressing any negative impacts found during monitoring would be addressed through corrective actions by the ranger district.

The Forest Fish Biologist would provide information to the Fisheries Sub-Committee to ensure any potential conflicts between PUD projects and NFS projects are resolved prior to implementation, and would act as liaison for coordination of any other projects proposed within the Le Clerc drainage.

**Comment #43 -**

To allow both projects to proceed I would suggest the following (1) Increased communication between the Forest Service and the District (2) ...Review of any activity within 300 feet of a stream in the Hanlon/ LeClerc Creek project...(3).joint meetings and monitoring of work and or water quality. We meet on a monthly basis, and would welcome a representative from your Hanlon project.

**Response:**

The Forest Fisheries Biologist will act as the Forest Service representative and coordinate with the PUD for any activities within the RHCA during the implementation of the Hanlon Project including timber removal, fuel treatments, and stream restoration work. This requirement is listed in the Decision Notice (page 5).

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*From Jeff Juel, The Lands Council*

**Comment #44 -**

We understand the challenges of managing the LeClerc Grizzly Bear Management Unit (BMU) as it is heavily checkerboarded by land owned by Stimson Lumber Co. The ownership pattern hinders attainment of Selkirks Grizzly Bear Recovery Zone grizzly bear habitat security recommendations set by the Interagency Grizzly Bear Committee (IGBC):

IGBC recommendations:

- Percent of BMU with open road density > 1 mile/sq.mi. ≤ 33
- Percent of BMU with total road density > 2 miles/sq.mi. ≤ 26
- Percent of BMU as core habitat ≥ 55

Current grizzly bear habitat security conditions:

- Percent of BMU with open road density > 1 mile/sq.mi. = 38
- Percent of BMU with total road density > 2 miles/sq.mi. = 59
- Percent of BMU as core habitat = 26

Consultation between the USFWS and Forest Service is based upon no net increase in those road density parameters nor a net decrease in core percentage after a project. We are glad that the Forest Service has stated a goal of increasing security via obliterating or installing permanent barriers on all roads feasible in the BMU. We note, however, that the EA does not have a comprehensive list or map of all such roads the action alternative would deal with, and so we will work with you in the coming days to identify all such potential road closures/obliterations.

**Response:**

The following table displays roads in the Le Clerc Grizzly Bear Management Unit that are potentially available to be bermed or otherwise made undrivable.

Road No. /area	Legal	Present status	Approx. miles	Comments
1935024 Onota Creek	T37, R44, Sec. 10	restricted (gated)	2.5	Road segment bermed by CNF in summer of 2009.
1934025 spur Jungle Creek	T37, R44, Sec. 15	restricted	0.4	Road already brushed-in. CNF might install guardrail barricade in 2010.
1936030 Cato Creek	T37, R23, Sec. 13	restricted	0.4	Road already brushed-in. CNF might install guardrail barricade in 2010.
SLC 1935500 Saucon Ck	T37, R44, Sec. 28	restricted	0.4	Road segment on NFS land bermed by CNF in summer of 2009.
1933150 Deception Lake	T37, R43, Sec. 2	open	0.5	Decision to keep open for recreation access to Deception Lake.

It appears that all other roads are unavailable for closure because they are:

- major gravel collectors/arterials that are open to the public,
- private, state, or county owned roads,
- roads which access private or state lands,
- roads which are already undrivable due to excavated berms/boulders on the road entrance, or due to being completely brushed-in.

Some of the roads listed above are located within the Le Clerc Grizzly Bear Management Unit but are outside the Hanlon analysis area. Therefore, closure of some roads are not part of the Hanlon decision. Effects of closed or open roads, including those listed in the table, are part of the effects analysis for grizzly bear as the effects analysis included the entire grizzly bear management unit.

**Comment #45 -**

Today we expressed to your our curiosity over the EA’s omission of an explanation for why the Colville National Forest (CNF) is no longer using the threshold of concern of 25% Equivalent Clearcut Area (ECA) in a watershed. We also expressed our concern that no substitute numerical water yield cumulative effects analysis appears in the EA. As we explained today, one subset of the water yield issue is peak flows. The draft hydrology Existing Conditions write-up for Hanlon EA states, “The dominant channel forming and sediment transport events are usually associated with spring snowmelt runoff in these watersheds.” In that report other potentially damaging events are described:

“Mid-winter rain-on-snow events are rare, but can cause runoff damage from peak flows. Late spring, rain-on-snow events and/or Chinook wind events are more common, but they are usually confined to higher elevations and resulting peak flows are localized and usually not excessive.”

“Rain-on-snow and resulting flash floods and/or debris flows are natural processes within the Hanlon Project Area watersheds. In the event of a flash flood, the impacts to stream channels are often caused by road-stream crossing failures.”

The scientific literature has indicated that these peak flow events may be exacerbated by logged off forest canopy. Due especially to the condition of Stimson Lumber Co. land, it appear that risk to the streams may already be a concern. Higher than natural peak flow increases may lead to stream channel erosion, aggradation, and resultant fish habitat damage during those infrequent, but unpredictable, rain-on-snow and other storm events. This is also a concern since the WEPP model being employed does not model instream sediment.

We urge the CNF to give strong consideration for utilizing the WEPP model for estimating numerical cumulative water yields, in order to increase our confidence in otherwise qualitative water yield discussions as presented in the EA.

**Response:**

These questions are addressed in the December 3, 2009, Addendum to the Hanlon EA Hydrology Report.

The science behind the ECA model was a water yield model based on rain-dominated events and surface runoff from large clear cut or agricultural areas. It also addressed vegetation recovery rates as it related to water movement. It was not developed to address flood flows associated with rain-on-snow events, which are the source of most flood flows on the Colville National Forest. An ECA threshold is an experience-based rule of thumb, but it is not based on scientific research. The threshold is used to determine if additional analysis is needed and is not used as a determination of negative impacts from a proposed management activity. The ECA output reflects one set of conditions (i.e., does not automatically regrow stands over time) based on the information entered for an existing or expected condition and produces an annual rate rather than daily or monthly rates.

Coalition members suggested using the Watershed Erosion Prediction Project (WEPP) to analyze water yield, peak flows, and low flow concerns. Although the model can be used in this manner, it has not yet been completed and validated for the diversity of vegetation, soil, climate and geologic conditions in the Hanlon project area. The WEPP model is a daily model with hourly snow and sub-hourly runoff calculations. It calculates surface runoff, surface erosion, and rain-on-snow events in watersheds. The part of the WEPP model that addresses lateral flow in watersheds is still being developed. There are still knowledge gaps in the model, though, that can affect the data response. There are gaps in the snow interception, base flow predictions, and channel processes prediction. Therefore, until the gaps within this model have been addressed, and the model validated and peer reviewed, it would not be in the best interest of science or management to just run the model.

The concerns with in-channel erosion are addressed using Rosgen Level II surveys for analysis. This is described in detail in the Hanlon Hydrology Existing Condition report, pages 8-10, and 15-17, and Hydrology Appendix H.4, H.5, H.6, H.7, and H.10. Channel morphology analysis clearly addresses this concern, which is why water yield and peak flows and their effects on in-channel erosion can be sufficiently inferred.

**Comment #46 -**

During our discussion today, we heard that roads are especially vulnerable during these storm events, and given the high road density in these watersheds, we urge the CNF to obliterate as many roads as feasible with the project, and bring others up to BMP standards, such as using outslipping roads and extensive waterbars instead of inside ditches.

**Response:**

Best Management Practices are described in more detail in Appendix E and in the Hydrology Appendix H.12 - Best Management Practices. BMPs for roads and trails are specifically addressed under section 15 – Roads and Trails (#15.02 – 15.25). These BMPs address design and maintenance requirements for roads including use of sediment control measures.

Closing and removal of system roads from the forest road system is addressed in the response to Comment #44.

**Comment #47 -**

We urge the CNF to disclose the best available science on road densities in regards to sustaining healthy fish and wildlife populations.

**Response:**

The CNF must manage road densities in the Hanlon project area per direction in the Amended Biological

Opinion for the Continued Implementation of the CNF Land and Resource Management Plan (USFWS, 2001). The US Fish and Wildlife Service relied on the literature cited in that document as the best available science pertaining to road density requirements in occupied grizzly bear habitat. The only other road density management direction for terrestrial wildlife species in the Hanlon project area is for elk. The CNF Forest Plan objective for elk winter range is to not exceed “0.4 miles per square mile of open road averaged over a three square mile area during the season of use”. This objective was based on literature cited in the Forest Plan including:

Lyon, L. J. 1979. Habitat effectiveness of elk as influenced by roads and cover. *Journal of Forestry*. 77(10): 658-660.

Thomas, J. W. 1979. Wildlife habitats in managed forests in the Blue Mountains of Oregon and Washington. *Agriculture Handbook 553*. Washington DC: USDA Forest Service. 512 pp.

Project design #40 (EA, page 28) requires the following for road management: “Avoid sediment delivery to streams from the road surface. On new roads and reconstructed roads outsloping of the roadway surface is preferred, except in cases where outsloping would increase sediment delivery to streams or where outsloping is infeasible or unsafe. Route road drainage away from potentially unstable stream channels, fills, and hillslopes.”

No publications relating to road densities and sustainability of fish species were referenced in the EA. However, the following publications support the analysis that high road densities and riparian roads can be detrimental to water quality, fish and fish habitat. These publications support the premise that reducing road densities and/or relocating and obliterating roads out of riparian areas would have a beneficial effect towards the sustainability of fish and their habitat.

Burns, J. 1972. Some effects of logging and associated road construction on northern California streams. *Transactions of the American Fisheries Society*. Vol. 101, No. 1.

Foreman, R. and L. Alexander. 1998. Roads and their major ecological effects. *Annual Review of Ecology and Systematics* Vol. 29: 207-231.

Jones, J. et al. 2000. Effects of roads on hydrology, geomorphology and disturbance patches in stream networks. Department of Geosciences, Oregon State University, Corvallis, OR. Pacific Northwest Research Station, US Forest Service, Corvallis, OR.

Luce, C. et al. 2001. Incorporating Aquatic ecology into decisions on prioritization of road decommissioning *Water Resources IMPACT* Vol. 3, No. 3.

Switalski, T. et al. 2004. Benefits and impacts of road removal. *Frontiers in Ecology and Environment*. 2(1): 21-28.

Wemple, B. et al. 1996. Channel network extension by logging roads in two basins, Western Cascades, Oregon. *Water Resources Bulletin* Vol. 32, No. 6 American Water Resources Association.

#### **Comment #48 -**

The EA states that some activities are proposed for Riparian Habitat Conservation Areas (RHCA), however the EA does not disclose the acreage extent or mapped locations of these activities.

#### **Response:**

The projects proposed under the Hanlon EA were not laid out on the ground prior to completion of the project analysis, so exact mileage and acres for activities within the RHCA are not available at this time. However, some of the activities proposed and analyzed include riparian habitat improvement projects (EA pages 20 & 21; Appendix B):

- relocating approximately 3.2 miles of the Middle Branch Le Clerc Road (FR 1935) to an upland area west of its present location, removal and replacement of culverts blocking fish passage, replacement of two culverts with a bridge, and obliteration of the existing riparian road (shown on map in Appendix B);
- West Branch Le Clerc Creek diversion dam sediment reduction; and

- Diamond City stream channel restoration, which would include placing a section of the West Branch Le Clerc Creek back into its original stream channel and away from eroding streambanks and cultural sites.
- Riparian exclosures would be constructed to protect stream segments throughout the project area that exhibit over-utilization by livestock. Riparian vegetation would be supplemented with plantings grown from local seed sources or with cuttings from local stock.
- User-created trails at Yocum Lake would be closed and rehabilitated to improve sanitation, reduce sedimentation, and improve vegetation along the lake shore.
- Areas within riparian-influence zones (outside edges of RHCA) would also be planted with spruce, or advanced regeneration of hardwood species, western redcedar or western hemlock would be released to encourage development of species that generally have longer life spans than lodgepole pine.

Project Design (Chapter 2) was included to address implementation requirements and provide information for the analysis and included the following requirements:

Vegetation management – a fisheries biologist or hydrologist would assist the silviculturist in developing site-specific prescriptions, marking guidelines and monitoring if units are located within RHCA (#19, page 25).

Fireline construction would not occur within Riparian Habitat Conservation Areas (#10, page 24). In RHCA where fire backs downslope, a cooler, creeping and smoldering fire of lower intensity is expected. If the fire enters the RHCA, a minimum of 90% organic material (duff) would remain on the ground in the RHCA after prescribed burns in order to protect soil and minimize sediment delivery to streams. In these RHCA, there would be no more than 10% bare ground exposed as a result of these prescribed fire projects. In most cases, fireline construction near riparian habitat is not planned. (#11, page 24)

Regarding the obliteration of Rd 3500000 within the RHCA of the Middle Branch of Le Clerc Creek, the approximate acreage within the RHCA to be obliterated is 7.8 acres. The new bypass road would cross the RHCA of 2 intermittent streams for an approximate acreage of less than 0.1 acre. The approximate acreage for restoration of dispersed recreation sites along the West Branch Le Clerc Creek is 0.3 acre. The new bypass road and the road to be obliterated are located on EA maps B4 and B6 respectively.

The proposed use of the existing overgrown road within the RHCA of the West Branch of Le Clerc Creek to access units #25, 24 and #44 shall have the minimum amount of vegetation removal, through cutting, that is needed for access and harvest. There shall be no soil disturbance such as grading for the preparation of this road. This road would only be used for winter logging. Use of this road shall be prohibited during warming periods if rutting begins to occur on the road surface. After sale activity is finished in the units, limit future access and damage to riparian and instream habitat from OHV use by placing rock material and/or slash at each end of this road segment. (#39, page 28).

#### **Comment #49 -**

Along with sediment yield, channel morphology, water quality and water yield, the EA also employs Watershed Condition as a key issue indicator. We note that soil functioning, especially cumulative hydrological damage to soils from past management activities, is not quantified in the EA's Watershed Condition discussion.

We urge the CNF to work with NEWFC to develop a comprehensive monitoring strategy to provide feedback on attainment of watershed restoration objectives, as well as soil conditions post-project.

#### **Response:**

The soil report describes how past activities, including timber harvest, have impacted soil condition. The soil report makes no attempt to describe the cumulative effects at the watershed scale across all ownerships. Soil quality is a very localized, site specific condition.

Watershed condition related to hydrologic processes is discussed in detail in the Hanlon Hydrology Report – Environmental Consequences. The summary for Alternative B on page 3 states:

Overall, the greatest amount of road conditions would be improved under this alternative because it would improve more miles of road (19.6 miles) than Alternative A (0 miles). The road reconditioning would reduce the potential for stream crossing failure and road related sediment production and delivery even if a severe wildfire (stand-replacing) does occur. Road reconditioning includes road reconstruction (Holt 2009), and follow-up maintenance and repair after haul. Beneficial uses, should such an event (i.e., wildfire) happen, would be impacted to a lesser extent and they would recover more quickly compared to the scenarios for Alternatives A.

Watershed condition indicators are discussed on page 6. Effects for alternatives are discussed by individual sub-watershed on pages 10 through 13.

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*From Paul Sieracki*

**Comment #50 -**

The range of alternatives is inadequate.

**Response:**

The alternatives analyzed in detail include no action (continuation of existing situation) and the proposed action. The proposed action, as modified through public input and collaboration, addresses the purpose and need for the Hanlon project as well as responds to many of the Tribal and public issues provided during project analysis.

The district considered one other alternative in response to public input provided at the beginning of the Hanlon project. Several members of the public asked that the Hanlon project include development of equestrian and OHV trails along with fuel, vegetation, and fish and wildlife habitat improvement projects. The IDT reviewed the location and impacts of the proposed trails and determined this alternative would not meet the purpose and need defined for Hanlon, nor would it meet Forest Plan direction. More detailed information regarding this alternative is displayed in the EA on page 17.

No other issues were brought to the district ranger during analysis that supported the development of additional alternatives.

**Comment #51 -**

Stream mitigation projects, fisheries enhancements and road obliteration can all be completed without a timber sale.

**Response:**

This is true. In past years the Colville National Forest (CNF) has completed all of these types of projects in the Le Clerc Watershed using appropriated monies, cost-share monies, grants, and volunteer labor. The Hanlon Timber Sale Environmental Assessment (EA) would complete the environmental analysis for a wide range of new habitat improvement projects. A portion of the receipts collected from timber sales (KV funds) that result from the Hanlon EA could be used to fund certain projects. Habitat projects could also be completed using stewardship contracts initiated under the Hanlon EA. However, stream and fish habitat projects alone would not meet the purpose and need for the Hanlon project.

**Comment #52 -**

The EA and biological evaluations lack site specificity and the use of quantitative methods and are not using the best available scientific information. For example, no map of suitable and capable habitat for white-headed woodpeckers is present, only vague statements about the availability of “thousands of acres of warm dry site stands that could provide essential habitats for white-headed woodpeckers” BE p 59. Where are all these stands located, what is the proposed treatment and what are the cumulative effects of the treatment to this species? Essential habitats? Have species and stand surveys been completed?

**Response:**

Stand exams were completed in most stands within the Hanlon Project Area. There are no records of white-headed woodpecker sightings in district files from the project area, and this species was not observed during stand reconnaissance for wildlife habitats completed in 2007–2009.

Intense wildfires that occurred in the 1920s and subsequent timber harvest removed most large Douglas-fir and ponderosa pine trees in the Hanlon Project Area. Presently, the project area contains about 25 acres of mature, park-like stands of Douglas-fir and ponderosa pine that could provide suitable habitat for the species (EA page D-57). Potentially capable white-headed woodpecker habitat in the project area is displayed on EA Map B-9 (PSME plant associations). As a rule, these stands are lacking in large tree habitat. Decades of fire suppression has allowed virtually all dry site stands to develop dense understories of firs and other conifers.

Proposed treatments of stands that are potentially capable habitat are displayed in EA Table 10 (Major species = DF). Silvicultural prescriptions are described on EA pages A-29 through A-31. No presently suitable stands for white-headed woodpeckers would be harvested. Effects of the project on white-headed woodpeckers are disclosed on pages D-58 and 59 of the EA.

**Comment #53 -**

Road densities are extreme and not adequately addressed in the biological evaluation or EA. eg. Road densities of 3.2 miles/sq mile in West Branch LeClerc watershed and 4.3! miles per square mile in the East Branch are well above recommendations that allow road density sensitive species to persist . This should result in a may effect determination for the BE for fisher, wolverine and grizzly bear and others just for the existing condition alone, any further activities in this area will further exacerbate the situation.

**Response:**

The CNF is required to report the impacts of roads on grizzly bears as the percentage of a Grizzly Bear Management Unit (BMU) that is affected by high open and total road densities. This is done using a “moving windows” GIS analysis. The Hanlon project is located in the Le Clerc BMU. The percentage of the Le Clerc BMU with high open and total road densities is disclosed in Table 14 of the BE. Figures are provided for the present condition, pre-project (following some road entrance obliteration work within the BMU), during the project, and post-project.

Presently there is no specific road density standard for occupied wolverine or fisher habitat. However, these animals should benefit from the application of core habitat and road density standards for grizzly bears.

The Hanlon project would result in a net decrease in open road mileage. A segment of Forest Road (FR) 1935 would be relocated and the old road abandoned. Part of an existing open road (FR 1900096) would be closed. Several restricted road segments would be bermed. Temporary roads used for the project would not be opened to the public and would be effectively closed following project activities on each road. At present the CNF has no additional opportunities to significantly reduce open or total road densities in either the project area or the Le Clerc BMU. This is because:

- State, county, or privately owned roads are not within the jurisdiction of the Forest Service.
- Continued access must be provided on CNF roads which access state or private lands.
- Other open CNF roads are major arterials that are needed for forest and range management, fire protection, and dispersed recreation.

The project would meet core habitat and road density standards for Federal actions in the Le Clerc BMU as presently defined by the US Fish and Wildlife Service.

**Comment #54 -**

There seem to be inaccurate statements of fire risk. Since a majority of private timberland in the area occur in a more or less checkerboard pattern and are already deforested there seems to be little justification for this as a fuels reduction project.

**Response:**

Wildland fuels on adjacent private ownerships include relatively open stands of immature ponderosa pine and Douglas-fir (FM 2, 5 and 9), closed stands of mature lodgepole pine, grand-fir, western larch, Douglas-fir and western red cedar (FM 8 and 10), and open stands of immature Douglas-fir and lodgepole pine with light to moderate logging slash (FM 11 and 12 respectively). Convective and radiant heat energy from a high intensity surface or crown fire can directly ignite wildland fuels at distances up to 120 feet (Cohen and Butler 1999). Fuel reduction treatments proposed for this project are designed to reduce the threat of severe surface and crown fire on NFS lands, which in turn should reduce the threat of severe surface and/or crown fires on adjacent private ownerships. Nevertheless, unless similar treatments are initiated and maintained on adjacent wildland ownerships, proposed fuel reduction treatments on NFS ownerships would have little effect reducing the threat of a severe surface and/or crown fire on private ownerships within the Hanlon analysis area.

**Comment #55 -**

What is the fire risk quantitatively and spatially?

**Response:**

The following table summarizes the crown fire risk and average fire behavior attributes for proposed Hanlon area stands. Based on their Torching and Crowning Indices as described above, stands were stratified into one of five crown fire hazard and risk category: Very Low, Low, Medium, Medium-high and High. Additional information regarding fire risk is located in the EA on pages 42-46.

**Crown Fire Risk and Fire Behavior Attributes for Proposed Hanlon Area Stands**

Crown Fire Risk	Acres	TI (MPH)	CI (MPH)	Crown Base Height (ft)	Fire Type	Mortality 97 <sup>th</sup> Wx	Mortality 90 <sup>th</sup> Wx
Very Low	1,186	78	32	18	Surface to Passive Crown Fire	64%	40%
Low	253	11	51	5	Passive Crown Fire	98%	27%
Medium	640	9	30	3	Passive to Active Crown Fire	94%	47%
Medium-high	1,662	64	21	15	Conditional to Active Crown Fire	97%	44%
High	906	6	19	3	Active Crown Fire	100%	61%

**Torching Index (TI)** is the 20-foot wind speed at which a surface fire is expected to transition into the crown fuels.

**Crowning Index (CI)** is the 20-foot wind speed at which a fire is expected to move horizontally through the forest canopy.

**Crown Base Height (ft)** is the lowest height above the ground above which there is sufficient canopy fuels to propagate fire vertically through the canopy.

**Fire Types:**

**Surface Fire** is one that spreads through surface fuels without consuming any overlying canopy fuels.

**Passive Crown Fire** is one in which the crowns of individual trees or small groups of trees will burn but solid flaming of the canopy cannot be maintained except for short periods.

**Conditional Crown Fire** is one in which crown fuels will support a sustained crown fire but the stand itself lacks the surface or ladder fuels necessary to initiate a crown fire.

**Active Crown Fire** is one in which the entire fuel complex is involved in flame. The crowning phase is dependent on the heat released from the surface fire (Scott and Reinhardt 2001).

**Mortality 97<sup>th</sup> Wx (Mortality at the 97<sup>th</sup> Percentile Weather)** - 'Severe' mid to late summer local weather parameters: 1-hr fuels: 4.3%; 10-hr: 6.6%; 100-hr: 7.3%; 1,000-hr: 9.9%; Duff: 15%; live fuels: 70%; Temp: 90F; 20-ft winds @ 25 mph (Tacoma Creek RAWS).

**Mortality 90<sup>th</sup> Wx (Mortality at the 90<sup>th</sup> Percentile Weather)** - 'Moderate' early to mid summer local weather parameters: 1-hr fuels: 5.2%; 10-hr: 7.2%; 100-hr: 8.9%; 1,000-hr: 11.2%; Duff: 100%; live fuels: 100%; Temp: 85F; 20-ft winds @ 10 mph (Tacoma Creek RAWS).

Approximately 26% or 1,186 acres of Hanlon area stands have a 'Very Low' risk of crown fire occurrence with an average Torching Index of 78 mph and Crowning Index of 32 mph. Average crown base height of these stands is 18 feet. Due to a sparse and/or discontinuous ladder fuel component, a mid-summer wildfire would most likely burn as a surface fire with occasional (passive) crown torching. Despite a relatively low crown fire potential these stands contain a high proportion of fire intolerant species such as lodgepole pine, western red cedar, grand fir, and western hemlock thus even a surface fire would kill between 40% and 64% of the overstory trees within these stands.

Approximately 5% or 253 acres of Hanlon area stands have a 'Low' risk of crown fire occurrence with an average TI of 11 mph and CI of 51 mph. Average crown base height of these stands is 5 feet. Due to a relatively dense and/or continuous ladder fuel component but sparse and/or discontinuous crown fuels, a mid-summer wildfire would most likely burn as a passive crown fire. These stands contain both fire tolerant and intolerant species. Mortality is predicted to be between 27% and 98% depending on predominant species, slope, aspect, fuel moistures, temperature, relative humidity (RH), and winds.

Approximately 14% or 640 acres of Hanlon area stands have a 'Medium' risk of crown fire occurrence with an average TI of 9 mph and CI of 30 mph. Average crown base height of these stands is 3 feet. Due to a moderately dense ladder and crown fuel component, a mid-summer wildfire would most likely burn as a passive crown fire with occasional (active) group torching. These stands contain both fire tolerant and intolerant species. Mortality is predicted to be between 47% and 94% depending on slope, aspect, fuel moistures, temperature, RH, and winds.

Approximately 36% or 1,662 acres of Hanlon area stands have a 'Medium-high' risk of crown fire occurrence with an average TI of 64 mph and CI of 21 mph. Average crown base height of these stands is 15 feet. Due to a sparse and/or discontinuous ladder fuel but dense crown fuel component, these stands lack the surface and/or ladder fuels necessary to initiate crown torching but a mid-summer wildfire would most likely burn as an active crown fire particularly if crown torching has already been initiated within adjacent stands. Mortality is predicted to be between 44% and 97% depending on slope, aspect, fuel moistures, temperature, RH, and winds.

Approximately 19% or 906 acres of Hanlon area stands have a 'High' risk of crown fire occurrence with an average TI of 6 mph and CI of 19-mph. Average crown base height of these stands is 3 feet. Due to a relatively dense and continuous ladder and crown fuel component, a mid-summer wildfire would most likely burn as an active crown fire. Mortality is predicted to be between 61% and 100% depending on slope, aspect, fuel moistures, temp, RH and winds.

### **Comment #56 -**

Fire refugia have not been modeled and addressed in the EA.

### **Response:**

Historic logging and high severity fires in the late 1920s and early 1930s shaped the analysis area and much of the landscape spanning from Blueslide, Tiger, and Lone WA. Although the Colville NF does not have a GIS layer specific to fire refugia, stand exam surveys and historic aerial photos have confirmed that relatively few trees survived the above mentioned events. Trees that did survive the events of the past 80 years are generally over 21" in diameter and are not proposed for harvest treatment. (EA pages 48 - 52)

Project Design requirement (EA page 25) - No old growth stands or structural stage 6 or 7 (late or old) stands are proposed for treatment within the analysis area. If any stands are identified as old growth or structural stage 6 or 7 during future reconnaissance or unit layout, they would be excluded from the harvest activity.

Project Design requirement (EA page 27) - Retain all trees 21 inches in diameter or larger, except those located within new ground-based or skyline equipment corridors, roads, landings, or rock pits.

**Comment #57 -**

Winter range cumulative effects analysis does not quantify the existing conditions based on *ecologically* designated winter range on both public and private lands. It does not take in to account adjacent areas that have been deforested. There is no map of winter range by species presented for the area.

**Response:**

Designated elk winter range (Forest Plan Management Areas 6 and 8) is mapped on page B-3 of the EA. The biologist also mapped the “biological winter range” starting with the CNF designated winter range and expanding that boundary onto state and private lands, based on aspect and elevation. He calculated the percentages of the various habitat components on the biological winter range, by Hanlon project alternative. These figures are displayed in the following table. There is little difference in project effects to winter range habitats whether the area used for the analysis is designated winter range (CNF lands only) or the biological winter range (all ownerships).

**Hanlon Project - Acres of habitat components on biological winter range by alternative**

Winter Range Habitat component	Alternative A (existing condition)	Alternative B
	Acres (percent)	Acres (percent)
Forage	2,107 (31%)	2,627 (39%)
Thermal cover	90 (<1%)	90 (<1%)
Snow inter. cover	0	0
Hiding cover	4,480 (66%)	3960 (59 %)
Other	62 (<1%)	62 (<1%)
Total winter range	6,739 (100%)	6,739 (100%)

**Comment #58 -**

The objector does not concur with statements by Kalispel Tribe officials that logging lodgepole pine stands will increase diversity. Lodgepole pines stands are important components of vegetative diversity in themselves especially when considered at a landscape level.

**Response:**

Lodgepole pines occur across a greater portion of the project area than would have been the case historically. The uncharacteristically intense wildfires that burned across the Le Clerc Watershed in the late 1920s were the result of large amounts of logging slash that was left untreated. Following these fires, lodgepole was able to quickly colonize exposed mineral soils. The Hanlon project would attempt to restore the historic tree species composition in the area by replacing lodgepole pine with western larch and other trees. Lodgepole pines would be greatly reduced in the project area, but not eliminated. Lodgepole trees would be retained within un-harvested stands, Riparian Habitat Conservation Areas (RHCA), and travel corridors for management indicator species (MIS). Even in shelterwood harvest units, lodgepole pine trees would be retained individually and/or in clumps.

**Comment #59 -**

The effects of landscape level tree cover reduction to songbirds is not addressed in any scientific manner. For example, there are many units labeled commercial thin/shelterwood. How many acres and *where* will the shelterwoods occur? Is there a map? How will species composition change with alternative B? What are the “targets” for songbird species in this area?

**Response:**

A map that roughly displays shelterwood harvest areas is located in the Hanlon project file. Shelterwood areas would be finalized during unit layout, based on the stand conditions encountered in each individual unit. An effects analysis of the Hanlon project to songbirds is located in the management indicator species report for the project. There are no “targets” for songbirds in terms of numbers of individuals of selected species in the Hanlon Project Area. Rather, the project would employ a number of conservation recommendations

described in Altman (2000) to maintain or improve priority habitats listed for the Northern Glaciated Mountains Sub-province.

**Comment #60 -**

The EA fails to address the effects of additional canopy cover loss to “corridors” from underburning, skid trails and post logging mortality that may reduce canopy cover even more, rendering the “corridor” ineffective. (not to mention corridors bisecting multiple crossroads.)

**Response:**

The locations of MIS travel corridors are roughly mapped for a timber sale EA and fine-tuned during unit layout. The CNF attempts to site corridors in the most mesic stands having the largest trees and highest canopy closure. Stands of cedar/hemlock or mixed conifers are the preferred types since canopy closure tends to be the highest in these stands. Stream courses and ridgelines are preferred routes for mapping corridors since furbearers naturally follow these features. Corridors are mapped to avoid roads to the extent possible, but they must cross roads at times in order to connect all old growth species habitat areas across the forest.

Effects of the Hanlon project to MIS travel corridors are disclosed on page 24 of the MIS species report. Timber harvest would not occur within portions of travel corridors having a high lodgepole pine or hardwood component. Where timber harvest is proposed within a MIS corridor, the harvest prescription would be written to conserve a high level of overhead canopy. Healthy, full-crowned trees would be priority trees to retain. Small-crowned, suppressed trees would be priority trees to remove. Timber harvest is allowed within mapped travel corridors so long as overhead canopy closure remains within the top third of the site potential. Post-logging damage to the residual stand has typically been less than 5 percent of the trees in harvest units on the district. Many damaged trees are likely to survive being injured. No biomass removal would occur within MIS corridors.

Fuels treatments in travel corridors are allowed provided “some amount of understory is left in patches or scattered to assist in supporting stand density and cover” (Lowe, 1995).

**Comment #61 -**

The objector is also concerned about broad scale canopy cover reduction at a landscape level and the same post-treatment activities as in 11 above, when combined with existing deforested habitats on checker-boarded private lands.

**Response:**

A reduction in forest canopy cover can be either a detriment or a benefit to wildlife, depending on the species in question. Bears, elk, and grouse forage on understory plants such as upland shrubs, grasses, and forbs. A reduction in overhead canopy can increase the sunlight available to these understory plants, leading to increases in forage productivity and palatability. Aspen and other hardwoods also stand to benefit from a reduction in conifer cover. Native hardwoods provide high quality nest sites for woodpeckers and songbirds, and forage for a range of wildlife species.

About 48 percent of the Hanlon project area would receive no timber harvest or other silvicultural treatment. Overhead canopy would be unaffected on those acres.

About 42 percent of the project area would be thinned or selectively harvested. Within harvested stands, canopy closure would be reduced for about 15 years, but there would still be much overhead cover retained. One objective of this timber harvest would be to move the project area closer to historic conditions for open, park-like stands. Historically, about 30-75 percent of the warm, dry DF biophysical environment in the Le Clerc Creek Watershed was in an open, park-like condition. Presently only 4 percent of these stands are in this state. These silvicultural prescriptions would reduce ladder fuels and focus growth on the healthiest, fullest crowned trees in the stand. The result would be a reduced risk of stand-replacing wildfires, and the more rapid development of large diameter trees. Trees that are 21” in diameter or greater would not be marked for harvest; with the exception of those trees within new road or equipment corridors, landings and rock pits.

Shelterwood harvest would occur over about 10 percent of the project area. These harvest units would be

located almost entirely within stands or pockets of lodgepole pine trees. The overhead canopy closure in these stands is already less than 50 percent, due to the typically small live crowns of this tree species. Lodgepole pine stands do not normally provide preferred habitat for wildlife species that are closely tied to a high level of overhead canopy (ex. goshawks). In shelterwood units there would still be individual trees and clumps of trees retained.

**Comment #62 -**

The BE fails to use the best available scientific information or even use current naming conventions. For instance, the bird “Blue Grouse” has been split and this bird is not even renamed in the EA as the Dusky Grouse *Dendragapus obscurus* which is the species that occurs in this area. Neither has Dusky Grouse habitat and conditions been mapped or is there any effects analysis. Portions are in spring habitat.

**Response:**

It is true that recent DNA evidence has led to blue grouse being split into two separate species; dusky and sooty grouse. The CNF Land and Resource Management Plan identifies blue grouse as a management indicator species (MIS). In order to avoid confusion until the new forest plan is completed, the district biologist will identify the species as “dusky (blue) grouse”.

Map B-9 in the EA displays the portions of the project area that are likely the most capable of providing spring habitat for this grouse (PSME plant associations). Presently very few acres of suitable spring habitat exist in the project area. An effects analysis of the Hanlon project to this species is located in the MIS report for the project. Briefly, the Hanlon project should improve dusky (blue) grouse habitat by: 1) avoiding winter roosting habitat (none exists in the project area); 2) avoiding springs and other water sources; and 3) promoting open, park-like stands with interspersed shrubs and ground forage, through conifer stocking control.

**Comment #63 -**

The BE for grizzly bear does not take into account other activities that are occurring in the grizzly bear unit, including displacement from cattle allotment activities and private land use. Activities such as brook trout eradication in White and Red Man Creeks provide attractants and increase the probability of a bear-human encounter during electrofishing. (Brook trout are killed and thrown on the bank instead of put in buckets and moved below a fish barrier.)

**Response:**

Cumulative effects to core habitat, road densities, and disturbance to bears resulting from the Hanlon project and private land use is covered on pages D-27, 28 of the EA.

The livestock allotment permittee requires vehicle access on about 6 restricted roads in the Le Clerc BMU to administer his allotment. The district biologist issues him a closed road use permit each spring. He records the dates of his vehicle entries on each road on the permit. The number of entries he requires on a given road is small (usually 1- 5 entries per year). Most timber harvest and other forest management associated with the Hanlon project would occur outside the active bear season. However, closed road entries for activities such as site preparation and tree planting could occur during the active bear season. Thus, the Hanlon project and administration of the livestock allotment could cumulatively contribute to the risk of bears being disturbed and displaced. This risk would be slight, owing to the small number of entries involved, and the fact that few entries would be authorized for the Hanlon project during the spring period for bears (mainly for tree planting). In addition, most activities would occur outside of core habitat areas. From about August 15 on, bears are increasingly likely to be found at elevations higher than the Hanlon area.

The Hanlon project would not result in food or other attractants being made available to grizzly bears. Thus, the project would not contribute to any cumulative effects resulting from electro-shocking and throwing fish on the bank. It should be noted that the CNF would put shocked fish into buckets and release them below a fish barrier or into other waters (personal communication with T. Shuhda). The Hanlon EA identifies the installation of food storage containers at dispersed campsites as a potential habitat improvement project. The ranger district received a grant from the US Fish and Wildlife Service to purchase and install 5 containers in the Le

Clerc BMU next year. These structures are intended to decrease the likelihood of bears being attracted to human food sources.

**Comment #64 -**

The project is apparently trying to use hiding cover as a justifiable mitigation for increasing displacement of grizzly bears by human activity.

**Response:**

The CNF is required to maintain hiding cover where it exists along open roads in grizzly bear habitat by the Amended Biological Opinion for the Continued Implementation of the CNF Land and Resource Management Plan (US Fish and Wildlife Service, 2001). Most Hanlon project activities would occur during the winter, when bears are in the den. There would be no heavy equipment/chainsaw operation in the recovery area from April 1 to July 1, in order to avoid disturbing/displacing bears during the critical spring period. The project would not result in a net increase in open or total road densities in the BMU. The project would not cause a net loss of core habitat in the BMU. In fact, core habitat would be increased with the excavation of earthen berms on some existing, restricted road segments.

**Comment #65 -**

Many roads are not securely closed to motorized use, rendering the TMRD and OMRD analysis very questionable.

**Response:**

The total motorized route density (TMRD) reflects all drivable roads and trails in a BMU. Whether a road is closed securely or not has no bearing on TMRD, since all open and restricted (gated) roads are counted in the TMRD analysis. Only those roads that are un-drivable are not counted in the TMRD. Roads classed as un-drivable must be completely brushed-in or effectively closed with earthen berms or boulders,

The open motorized route density (OMRD) reflects open roads as well as those restricted roads that exceed the authorized vehicle trip threshold for the Selkirk Mountains Ecosystem in a given year. A restricted road that receives heavy illegal motorized use in a given year should be classed as an open road for that year. The TMRD and OMRD analysis in Appendix D of the Hanlon EA is a good reflection of conditions on the ground, based on the following discussion.

The ranger district has a comprehensive closed road monitoring program in place with emphasis on the grizzly bear recovery area. Wildlife technicians check gates and other closures on a routine basis. They record any evidence of illegal motorized use such as vehicle tracks skirting around gates. They monitor about 12 traffic counters installed on closed roads in the recovery area.

The CNF continues to improve the effectiveness of road closures in the grizzly bear recovery area. This work includes installing boulders or cement posts off to the side of gates and replacing gates with earthen berms or boulders. In recent years, the District has completed many such projects in the Le Clerc BMU. Our monitoring has shown that this work has significantly improved road closure effectiveness.

The CNF published its first Motor Vehicle Use Map (MVUM) in 2009. This map displays roads and trails that are designated open to motorized travel, including the types of vehicles permitted on the route. If a route is not open to motorized vehicles, it does not appear on the map. In the CNF's portion of the grizzly bear recovery area, there are only two forest roads designated by the MVUM as open to off-highway vehicles (OHVs); the Dry Canyon Road (FR 1933) and the Hanlon Cut-off Road (FR 1935115). Both roads are major arterials located in the Le Clerc BMU. Off-road travel is now illegal on the forest, except to access an established, dispersed campsite within 300 feet of an open road.

MVUM maps are free to the public and hundreds of copies have been distributed through the CNF offices, law enforcement officers, and other employees in the field. With the publication and enforcement of the forest's MVUM, OHV use in recovery habitat has dramatically declined. Public knowledge of the maps and new regulations is becoming widespread. The word appears to be getting out that OHV riders not in compliance with the maps are at risk of receiving a citation.

**Comment #66 -**

There is little or no mention of the effects snowmobile use have on winter range, to wintering furbearers, access to stands by trappers, or grizzly use in early spring not to mention access to subalpine habitats where endangered mountain caribou persist.

**Response:**

With the exception of the relocation of a segment of FR 1935, the Hanlon project would not change any groomed or un-groomed snowmobile routes. No new routes would be added.

Timber harvest would create some openings along roads that are open to snowmobiles. Post-harvest, these openings would contain stumps, down logs, brush, and conifer regeneration. The project area lies at lower elevations, where snow depths are shallower and less likely to cover these features. Strips of smaller conifers and other vegetation would be maintained along open roads to provide hiding cover. Thus, opportunities for snowmobiles to be driven off-road should be quite limited.

The Hanlon Project Area lies below 3,500 feet. This is well below the subalpine habitats used by caribou in the winter, or by grizzly bears as they emerge from the den in early spring. The project would have no effect on snowmobile use of mid-high elevation roads or areas.

**Comment #67 -**

Mitigations, and cumulative effects analysis for “sensitive plants” are not adequately addressed or analyzed.

**Response:**

The information in the Hanlon EA is correct regarding sensitive plants. The BE describes Forest Service management direction for sensitive plants. The two design elements (buffering and flagging/avoiding sensitive plant locations) included in the Hanlon EA are meant to mitigate potential negative effects of proposed treatments in the action alternatives. Revisits to sensitive plant locations across the forest show that buffering sites from proposed harvest treatments assures that the canopy cover is undisturbed for shade dependent plants. Buffering sites also maintains the hydrology of the site. Both are critical in maintaining the integrity of habitats for shade and moisture dependent plants.

**Comment #68 -**

There are many other issues that need to be resolved before this project can proceed, including elimination of the cattle allotment.

**Response:**

Elimination of the Le Clerc Grazing Allotment is beyond the scope of the Hanlon EA.

**Comment #69 -**

The USFS is tampering with this drainage at an ecosystem level. Because of the presence of many endangered and sensitive species, a somewhat checkerboarded ownership pattern and the potential for the project to significantly modify the existing environment, an EIS must be prepared.

**Response:**

The district biologist and forest fish biologist determined that implementation of the Hanlon project as proposed would not be likely to adversely affect threatened, endangered, or sensitive (TES) species. These conclusions were based in large part on the many project design elements that would be intended to minimize, mitigate, or eliminate potential negative effects of the project to the species or their habitat (see EA pages D-16, 17 and 18). The CNF received concurrence (December 3, 2009) from the US Fish and Wildlife Service on the determinations for threatened and endangered species. An EA is the appropriate level of NEPA documentation for the project.

**Comment #70 -**

I am opposed to logging and road building at such an extreme level.

**Response:**

The projects proposed under the Hanlon EA include harvest of approximately 4,647 acres; precommercial thinning of approximately 624 acres; fuels treatments of approximately 6,708 acres; and decommissioning/obliterating approximately 3.2 miles of road located within RHCAs. Completion of all road-related project activities would result in a net decrease of 5.8 miles of road from the Forest Service transportation system. Analysis of the proposed projects resulted in a determination of no significant impacts.