December 20, 2018

Sandy Mack, Team Leader

Swan Lake Ranger District

24 Fort Missoula Road

Missoula, Mt. 59804

Dear Team Leader Mack,

Thank you for the opportunity to provide scoping comments on the proposed Mid-Swan Landscape Restoration & Wildland Urban Interface Project. Please enter my comments into the official record and advise me as updates and additional steps occur.

From reading the proposed action and examining the maps showing the scope of the project, it’s clear that the Flathead Forest has developed this plan in an alternate universe where grizzlies and lynx have been delisted and their security and habitat needs can be ignored. In the real world, that’s obviously not the case. In addition, while the scoping document makes it clear that many of the problems in the project area were caused by excessive logging and roading of the landscape it then goes on the claim that the solution is more logging and roading. Nothing could be further from the truth.

In the real world, grizzlies remain a Threatened species and are likely to remain so for the foreseeable future for the same reason that Greater Yellowstone bears were recently relisted. In the real world, the NCDE Conservation Strategy (CS) has not been approved, and due to a number of arbitrary and capricious provisions, won’t withstand legal or scientific scrutiny (See my attached comments on the CS, Flathead Forest Plan, and Grizzly Amendments). In the real world, Amendment 19 to the Flathead Forest Plan is still in full force, and rather than creating another 60 miles of road, the Forest must get back to closing the remaining 518 miles of roads required by A19 (USDA 2017), many of them in the Swan Valley. Finally, in a Swan Valley fractured by checkerboard moonscape logging, the scoping document fails to present a reasonable, fact/science based argument for why more logging is the solution, or the Forest Service should be entrusted to apply it in an ecologically sound manner.

The scoping document lists the purposes of the Mid-Swan Project as follows:

\* Restore and maintain aquatic biodiversity in light of climate change.

\* Restore and maintain terrestrial biodiversity in light of climate change.

\* Reduce the risk from wildfire in the wildland urban interface.

While each of these seem like laudable goals on the surface, the devil is in the details, and project implementation repeatedly ignores science, breaks the law, fails to operate under the “Precautionary Principle”, and would further fracture landscape connectivity. Specific examples that must be corrected follow:

I. Aquatic Biodiversity Challenges:

(a) Sediment in streams

(b) Human-created barriers preventing fish access to suitable habitat

(c) Lack of small-scale disturbance to riparian areas

(d) Reduced beaver activity

\* It should be noted that all of these problems have been directly caused by excessive logging, road networks, improper stream crossings, fire suppression by USFS, and excessive beaver harvests on NFS managed lands.

In addition, the scoping document says, “An overarching aquatic challenge is the widespread presence of non-native fish which can outcompete native fish. This is a primary limiting factor for a properly functioning aquatic ecosystem. Directly managing fish populations is outside the scope of Forest Service management direction and is not discussed as an action in this document.” (emphasis added).

So, having identified a “primary driving factor” degrading aquatic ecosystems, the Flathead simply washes its hands of this critical matter because it isn’t covered by current “management direction.” The obvious solution is to begin work immediately at the local, regional, and national level to change this significant management failure and begin working directly with Montana Fish, Wildlife and Parks (FWP), and the Confederated Salish & Kootenai Tribes (CSKT) to address this overarching aquatic challenge rather than blowing off such a fundamental management responsibility.

(a) Sediment Reduction:

P: 5 of the proposal identifies the Cold Creek and Jim Creek drainages as “Functioning at risk, primarily because of existing high road densities.” With the Forest 518 miles behind on road closures and decommissioning as required by Amendment 19, the obvious solution is a renewed commitment by the Flathead to a significant and sustained program of decommissioning, yet once again, the Forest drops the ball.

The proposal reports that it will engage in a program of “decommissioning, storing, or improving approximately 167 miles of the 570 miles of existing Forest Service roads…” Yet Table 1 on P: 14 shows that 100 miles (59.8%) will be “stormproofed”, 67 miles (40.1%) receive best management practices, and 0.00 miles will be decommissioned. Clearly this totally defies A19 best science, logic, and law, and must be completely revisited, with the vast majority of these 167 miles decommissioned.

The Flathead has been largely dodging its responsibility in this regard since 2011, and it’s time for the foot dragging to end. It’s equally clear that until A19 is fully complied with in the Swan Valley, none of the 60 new road miles proposed by this project can even be considered.

(b) Aquatic Passage:

P: 6 of the proposal says that “Restoration work on NFS lands in the last few decades have removed or improved known passage barriers with five known exceptions.” Unfortunately, the public is never told what those “five known exceptions” are, making analysis impossible. However, it’s obvious that road decommissioning under A19, with all culverts pulled and the crossings re-contoured and hardened to natural levels, would restore fish passage on a far broader landscape level.

(c) Disturbance in Riparian Areas:

The proposal notes that, “With a century of fire suppression riparian zones function differently than they did historically…Conifer forests are encroaching resulting in a loss of hardwoods.” We’re told that such dense forests are more prone to insects and disease (both naturally occurring events) and that any fires are likely to be more severe. While this is a possibility, no research data is presented showing that the Flathead has any idea what riparian forests looked like historically before the advent of extensive fire suppression nearly a century ago. In the absence of such data, it’s equally likely that the Forest is simply looking for a reason to log in these ecologically important and sensitive zones.

From 40+ years working in natural resource management, it’s been my experience that most riparian zones are cooler, more moist, with higher humidity and fuel moisture, and less wind – all conditions that tend to lower fire intensity & severity. Removal of conifer species will certainly improve sunlight to deciduous species, but it will also increase stand temperature and wind – both major drivers of fire blowups.

P: 15 of the proposal notes that “The Flathead Forest Plan, splits Riparian Management Zones (RMZ) into the Inner Riparian Management Zone (IRMZ) and Outer RMZ (ORMZ) of varying widths…there are about 21,000 acres of IRMZ and 37,000 acres of ORMZ…”

First, it’s important to remember that the new Flathead Forest Plan has yet to receive final approval and should not be used as the justification of any management action. Second, since the Flathead Forest Plan is significantly grounded on the bad science and false assumptions of the NCDE Grizzly Conservation Strategy, its validity is in serious question (See my attached Objections). Third, as I noted in those Objections, “The change of name from Riparian Habitat Conservation Areas (RHCA) in the 1986 Plan to Riparian Management Zones now is not cosmetic. It is clear that the Forest’s priority for these areas is no longer “conservation”, but has shifted to heavy-handed “management.” Until such time as the Flathead can provide a documented historical record of what these riparian forests looked like a century ago, and a compelling ecological need to enter them with logging operations, no such activities should be approved or initiated.

(d) Reduced beaver activity:

The proposal reports that 32 of 36 (89%) of documented beaver dam sites in the Mid-Swan area are inactive. It notes the various critical roles that beaver play in riparian and wetland areas, but then proposes to solve this obvious problem by constructing analog beaver structures – essentially fake beaver dams – to mimic beaver activity.

Here’s a better – and cheaper idea – reintroduce actual beaver to all of those locations; let them construct Actual dams for free; and work with Montana Fish, Wildlife and Parks to restrict beaver trapping for 10 years in the Mid-Swan to allow beaver to re-establish themselves, and restore riparian habitats.

II. Terrestrial Biodiversity Challenges:

(a) Loss of large trees and old forest structure

(b) Loss of western white pine and whitebark pine

(c) Lynx habitat quality, distribution, and long-term availability

(d) Missed fire intervals through fire suppression

(e) Overabundance of young forests with multi-stories and shade tolerant species, especially subalpine fir.

(f) Highly fragmented forests in the valley bottom (too many small patches)

(g) Homogenous forests at higher elevations due to fire suppression (few large patches).

\*\* It’s important for the Flathead to acknowledge that every one of these “challenges” has been created by the Forest Service in concert with Plum Creek, and Montana Department of Natural Resources and Conservation, and that significantly different management approaches will be necessary to set things right. Yet what this proposal emphasizes is more logging, much of it regeneration harvest (Clearcuts and functional clearcuts), more roading and retention of most system roads, along with some prescribed burns. Not a promising start.

(a) Loss of large trees and old forest structure:

This section reports that “photo interpretation” and “modeling” were used to locate areas with medium to large trees, and understand historic diversity of upland forest ecosystem. First, it’s not clear how modeling tells the Forest anything about historic conditions. And second, neither of these techniques seems to have been “ground truthed” by foresters and biologists actually getting out of the office and walking the Mid-Swan landscape – both of which would seem to be important.

The proposal to encourage and connect stands of large larch, Douglas-fir, and ponderosa pine by thinning within and adjacent to these stands may have merit depending on how that thinning is done. If the emphasis is on clearcuts (aka regeneration harvest) it will raise suspicion that the Forest Service is just looking for another excuse to log and road a landscape that’s seen plenty of both already, and needs a far lighter hand.

The proposal says that, “Forest carnivores such as fisher, marten, and lynx would benefit in the long-term (emphasis added) from efforts to promote the connectivity of older, multi-story stands and to protect that connectivity from high severity fires.” That may well be true, but the welfare and habitat of those and other species cannot be sacrificed in the short-term – as seems to be the case for lynx.

(b) Western white pine and whitebark pine:

Here again, the Forest has used “high-resolution 3-D aerial photographs” to determine remnant stands of these species. It’s necessary for FNF staff to put down the computers and get out on the actual landscape for visual confirmation of those photos, and to get an overall sense of the area first hand.

In western white pine (WWP) stands, the proposal recommends pruning lower branches and thinning to reduce blister rust infections and reduce competition from shade tolerant species. Does such pruning have a demonstrated history of success in reducing infection? We’re not told. Both pruning and thinning are labor-intensive, money losing operations for commercial logging outfits so who will do the work, and how will it be paid for? In addition, I support the planting of rust-resistant WWP, but wonder if this is contemplated at the massive scale (tens of thousands of seedlings per year) that will be necessary to re-establish the species?

Regarding Whitebark Pine (WBP), it’s also unclear that the Flathead is making a commitment to the sort of massive replanting and restoration program using blister rust resistant trees that’s required to bring this species back to the keystone role it once played – particularly as it relates to Clark’s Nutcrackers and grizzly bears. Replanting a few thousand rust resistant trees per year and placing several seeds in specific micro-sites may be a nice PR move, but it won’t restore this ecologically critical species in any functional way – even over 100 years. The coming EIS must detail the historic range of this species – both on the Flathead, and NCDE-wide and lay out a specific, long-term, binding effort to replant thousands of acres per year, with tens of thousands of seedlings.

It’s important to realize that even the planting of 50,000 seedling per year over 20 years, with 100% survival only gets us to 1 million young, non-cone producing trees – still nowhere near recovery, but a start that should have begun long ago. It’s also important to realize the critical role that restored, cone-producing WBP forests would play in securing the long-term future of threatened grizzlies. As demonstrated by research in Greater Yellowstone, Whitebark Pine is not only critical because it’s a Key Food for grizzlies, but because the trees occur at higher elevations away from most people and developments, lowering conflicts and grizzly mortalities. The widespread restoration of WBP in the heart of the NCDE would functionally increase the habitat carrying capacity for grizzlies, while potentially mitigating bear movements and conflicts in poor berry years.

(c) Lynx Habitat:

Four Objectives are identified from the Northern Rockies Lynx Management Direction as follows:

(1) Manage vegetation to mimic or approximate natural disturbance processes while maintaining habitat components necessary for the conservation of lynx.

(2) Provide a mosaic of habitat conditions through time that support dense horizontal cover and high densities of snowshoe hare.

(3) Conduct fire use activities to restore ecological processes and maintain or improve lynx habitat.

(4) Focus vegetation management in areas that have potential to improve winter snowshoe hare habitat but presently have poorly developed understories that lack dense horizontal cover.

While the P: 9 assessment correctly states the importance of “core-use areas”; the fact that they historically fluctuated across the environment; and the risk of losing static core areas in stand replacing events, it then pushes the Flatheads usual, one size fits all solution – More logging. These include, “Strategically removing finer fuels in and around these areas” without compromising habitat integrity; “Limited use of regeneration treatments (ie. Clearcuts) to “ mimic the interactive effects of overlapping mixed and high severity fires and: “In some cases and over a limited spatial extent, this may require reducing habitat quality in the short-term (10-20 years) in order to promote the long-term development of high quality habitat…” (Emphasis added).

So the Mid-Swan Project says it doesn’t want to compromise habitat integrity, but them proposes to do exactly that; wants to avoid the damage that “high severity fires” could cause to core areas, but then proposes regeneration harvest (Clearcuts) because they mimic – high severity fires; and then tries to convince the public that reducing lynx habitat quality for 10-20 years is “short term.” I wonder how many of the Flathead Forests employees would have no problem being tossed out of their homes for 10-20 years because the loss would only be “Short-term?” While some of the Forests proposals may have merit, it’s difficult to tell because we don’t have enough specific detail of what is functionally being proposed, and because the proposal goes to great lengths to apply “spin control” to what appears to be just more logging to solve the problem of too much past logging. In addition, the Flathead seems to have forgotten, or ignored, that lynx are a “Threatened” species whose habitat can’t simply be re-shuffled to meet “manager preferences.”

(d) Missed Fire Intervals:

The proposal correctly quotes Ayres (1900, P: 77) that fire was the norm between 1800 and 1900; that valley bottoms likely saw frequent low to moderate fires; and that middle to high elevation areas were on a 100-200 year fire return regime. The specific activities to address the “fire deficit” in low elevation valleys are not clear at all from the following: “The deficit areas have been identified as priorities to restore characteristic fire that needs to be implemented after accounting for more recent management activities that have been slowly adding fire back into the landscape.” From the maps in Appendix B, it’s clear that this includes a number of areas of non-specific “prescribed burns”, but also significant areas of logging in valley bottoms. If current problems were created by over-logging as well as under burning, how does more logging – particularly regeneration harvest - solve the problem? The proposal is not clear.

(e) Structure and Cover:

The proposal notes that, “…the Mid-Swan vegetation is dominated by multistory forests composed of small to mid-sized shade tolerant conifers including subalpine firs, Engelmann spruce, western red cedar, and grand fir. This is a departure from historical and future reference conditions.” First, since these forests have been highly manipulated and logged for more than 60 years, and no structure and cover research is cited for 1900-1960, how does the Forest know what “historic conditions” actually were? Second, since “future reference conditions” have yet to occur, how do we know that they’ll differ from current conditions?

Page 10 of the proposal says, “Fire suppression has created homogeneous subalpine fir forests that cover large areas at higher elevations and less accessible slopes.” Since the Forest Service has only been in charge of these areas since 1906 and these higher elevations are on a 100-200 (or 300) year burn cycle, this statement is likely false.

In addition, P: 10 says that, “Management activities are needed to promote early seral fire resistant species (logging), including western larch and ponderosa pine, convert subalpine fir to another cover type (logging), and to move young forest multistory stands to other structural stages (logging). – (Emphasis added). Nowhere in this passage do we see an acknowledgement that what’s being proposed is some fairly significant logging and roading. Nor do we see any rationale for why a problem largely caused by logging and road building, should be solved by more logging and road building.

(f) Patch Density and Large Patch Departure:

The proposal notes that “lower elevations of the Mid-Swan are a landscape that is highly fragmented from small scale mechanical treatments (logging), ownership boundaries, and roads…In the lower elevation valley bottom, intensive management (logging) in a checkerboard of sections once owned by Plum Creek Timber Company (now largely under public ownership) alternating with public, state, and private land has created a highly fragmented landscape with limited connectivity between older forest stands. In the upland and higher elevation areas fire suppression has allowed the forest to gradually homogenize, creating large, contiguous patches of dense, young, multi-story forest.” (Emphasis added).

First, I am concerned that the Flathead seems to be institutionally incapable of using the word “Logging”, and admitting that they bear a substantial responsibility for the fragmented Mid-Swan. Second, there is no acknowledgement that thanks to the Montana Legacy Project, large areas of checkerboard are now in USFS hands; that full implementation of Amendment 19 on All NFS parcels would go a long way to healing the fragmentation; and that such implementation is still required by law. Third, the suggestion that fire suppression in higher elevations (presumable the Subalpine) has resulted in homogenous, young, multi-story forests. As the Flathead is well aware, these forests are on a 100-200 year burn cycle so could not have been caused by effective suppression efforts that are less than 100 years old. In addition, unless USFS logging caused it, these forests should largely be nearing old growth status, not a young, multi-story condition. And finally, aren’t such multi-story forests and “dense horizontal cover” highly favorable for lynx in the long-term?

On P: 11, the proposal refers to the “homogenization of forest structure” in upland areas raising the risk of large fires and habitat loss, but in the next paragraph quotes Ayres (1900, P: 39) as reporting that “High, moderate, and low severity fire all played a role in creating a mosaic of patches on the landscape.” However, as I recall, Ayres reported that much of the forest had been affected by large, stand-replacing fires, suggesting that this was the historical condition. If so, the proposal’s claims that “native species would benefit from management actions that realign habitat patches and promote a natural disturbance regime” are perhaps false, since they’re no doubt referring to logging in an over-logged area, and stopping large fires which may be natural. From the less than straight forward, plain English wording of many passages it’s difficult to tell specifically what “management action” means in each circumstance.

I agree that climate projections of less snowpack, earlier melting, and hotter, dryer conditions leading to more frequent, larger, more severe fires is almost certain. If the Flatheads intention in low elevation and valley bottom areas where patches of large ponderosa, larch, and Douglas-fir hang on is to conduct some Very judicious thinning, followed by careful prescribed burns, that may be supported, but it’s difficult to tell from the text and small maps provided. The Flathead must realize that it has a less than stellar reputation for careful land management driven by science and law. If that is to change, proposals such as Mid-Swan must make it crystal clear that all management will strictly adhere to the Precautionary Principal rather than be thinly veiled attempts to justify more logging, more roads, and less protection for Threatened species.

If the Forest is trying to justify more logging in higher elevation areas where fire suppression has also happened, it needs to explain how forests that should be old growth and near old growth, are instead young multi-story stands. If the answer is logging by USFS and Plum Creek, then the Forest must clearly explain how more logging is the solution.

On P: 12 the proposal reports that valley bottoms many also burn at high intensity and “Many areas would regenerate into homogeneous lodgepole pine stands and eventually be replaced by shade tolerant species like grand fir, western red cedar, western hemlock, or Engelmann spruce.” (likely a 100-year process). Yet P: 11 says that these stands are currently dominated by subalpine fir, spruce, grand fir, and western red cedar – so where’s the seed source for those “homogenous lodgepole pine stands?”

P: 12 also refers to the homogenization of the landscape as being a bad thing for lynx as habitat matures and becomes less productive for snowshoe hares and lynx foraging, with the apparent solution being prescribed fire. However, if this is good for hares and lynx, why does P: 9 refer to reducing habitat quality for lynx over 10-20 years – a decidedly long-term?

III. Wildland Urban Interface Fire Risk:

Challenges:

(a) Flame lengths are greater than four feet, precluding direct attack.

(b) Crown fire initiation conditions are too high.

(c) Crown fire propagation – crown bulk density is too high, greater than .08kg/m3, which sustains a crown fire.

Before addressing any of these challenges, it’s vital that the Flathead Forest revisit and correct its maps showing the Wildland Urban Interface (WUI). Anyone who has traveled Highway 83 and the spur roads leading east and west from it knows immediately that outside of actual communities and a few small “subdivisions” or clusters of homes, there’s nothing remotely “urban” about the Swan Valley. However, even a cursory look at project maps, beginning with Map 03, shows the Flathead trying to justify a WUI of 1-3 miles width on either side of Hwy. 3, which simply doesn’t “pass the straight face test.” Rather, this artificially inflated WUI seems to be a transparent attempt to expand the area in which the Forest then tries to justify more “active management” and road building including extensive thinning and harvest – including regeneration logging (Clearcuts).

This unjustified expansion of a WUI untethered from reality threatens to undermine efforts to address the very real problem of more severe fires in actual urban/settled areas. Therefore, the Flathead must correct these maps to accurately reflect efforts around actual communities and clusters of homes. In that regard, the corrected WUI boundaries cannot be based on USFS efforts to protect private land, but must be centered around actual homes. Similarly, the WUI cannot be expanded from one mile to three miles simply to include the home of one, or several, careless homeowners choosing to build out in the middle of nowhere. It is not the responsibility of the Forest Service to spend scarce dollars, or risk firefighter lives to protect bad decision-making by the public.

(a – c) Flame lengths, Crown Fire Initiation, and Crown Fire Propagation:

First, it’s clear that all of the above attributes are based upon “modeling, photo interpreted polygons, and assumptions/estimates” from them. Nowhere do we see any suggestion that management conclusions were, in any way, backed up by turning off the computers, getting out of the office, and “groundtruthing” any of the conclusions on-site. It doesn’t seem like an unreasonable expectation that foresters and wildlife biologists actually get out in the forest before making important decisions.

Second, while it’s always important to “Fight fire aggressively, but provide for safety first”, the statement that “Flame lengths are greater than four feet precluding direct attack”, suggests an unusual, and perhaps unwarranted timidity at USFS regarding fire management. As a Park Ranger for 20+ years, I worked on more than 400 fires, and we routinely and safely employed direct attack on fires with flame lengths of 4-6 feet. I fully understand that due to global warming (heating) we are facing fires of greater severity & intensity, but precisely because of that, it seems that reluctance to attack fires with 4-foot flame heights ensures more fires with 40-100 foot flame heights.

Third, the proposal’s solution to the listed “challenges is as follows:

“Changes from existing conditions are needed to reduce risk from wildland fire to these values at risk. Conversion to vegetation and fuel conditions that allow for direct attack reduces risk of loss of life and damage to property and reduces the risk from fire within the WUI.

To achieve this, there is a need to reduce potential flame lengths to four feet or less in forested fuel models, reduce ladder fuels by increasing crown base height in areas of potential crown fire initiation, reduce crown fuels by reducing crown bulk density in areas of potential crown fire propagation, and maintain the above areas as well.”

The immediate problem with this approach is that it focuses almost entirely on fuel reduction – which of course translates primarily to the thinning/logging that USFS favors – when much of the recent research shows that fire frequency, intensity, severity is primarily driven by heat, drought, and especially wind (See attachments). And while the Flathead might be able to make a case for light to moderate thinning followed by prescribed burns, Map 02 clearly shows substantial areas slated for regeneration logging (Clearcuts), with even more in “thin with regeneration openings” – functional Clearcuts in terms of carnivores generally, and grizzlies specifically.

In addition, as noted earlier, the scope of the mapped WUI shows that the Forest intends to log and burn on a landscape scale on public lands, while most recent research shows that the most effective fuel reduction is that occurring within 100 yards or less of homes (See Attachments). In most cases, this will be on private property and the responsibility of the private landowner – Not USFS operating on the public’s dime.

**Flathead Forest Proposed Action:**

I. Restore and Maintain Aquatic Ecosystem Resilience:

\* The proposal would “Stormproof” (decommission, store, or improve) about 167 miles of existing NFS roads including about 20 miles in RMZ’s to improve their function Emphasis added). It’s clear that the USFS intent is to keep most of these roads for future use, with decommissioning an afterthought. In a world where the Flathead is 518 miles behind on its legally required road closures & decommissioning under A19; where the NCDE Conservation Strategy will be DOA over violations of science and law; and NCDE delisting has reached the same dead end as Greater Yellowstone delisting, it should be obvious that the vast majority of those 167 road miles must be completely decommissioned, culverts pulled, and the former road template restored to more natural conditions and incapable of functioning as a road or trail.

\* The proposal recommends improving or removing five known fish passage barriers (culverts) at road/stream crossings. Given the massive, required, road decommissioning just mentioned, it’s likely that scores of culverts (or more) must be removed (not “improved”) across the entire Mid-Swan.

\* The proposal says, “Apply terrestrial vegetation treatment actions within a portion of RMZ’s to better match predicted/desired conditions.” As noted earlier, the Forest has no idea what historic conditions were a century ago, so this passage will be entirely – an inappropriately – aimed at meeting Manager Desired Conditions. According to Table 2, these “treatments” will cover 9500 acres of this vital wildlife habitat, 5000 acres by thinning (logging), and 4500 with prescribed burns. Unless the Forest Service can clearly demonstrate a compelling ecological need for these activities, they should not occur.

\* “Implement beaver dam analog structures (Fake Dams) at nine stream sites to increase water holding capacity in cold water drainages, partially offsetting predicted climate change effects in key stream reaches.” (Emphasis added). While the Flathead has its heart and head in the right place in this regard, the effort is Too Little and Too Fake. Certainly these structures should be installed (at taxpayer expense it should be noted), but the effort must be throughout the Mid-Swan and involve – along with Montana Fish, Wildlife and Parks (FWP) – a comprehensive real beaver reintroduction program. This must be coupled with a joint decision with FWP to close the entire area to trapping for a decade to allow beaver reestablishment and dam construction – largely for free. After beaver re-establishment, the Forest Service, in concert with FWP, must decide what, if any, levels of trapping are appropriate if beaver recovery is to be maintained.

II. Restore and Maintain Terrestrial Ecosystem Resilience:

\* The proposal would reduce ladder fuels, crown bulk density, and crown fire hazard in or around 23,700 acres, but we’re given no specifics as to how this will be achieved. Will most of it be by pruning and thinning (13,300 acres, Table 1), or by some form of “regeneration harvest” (Clearcuts, 26,500 acres, Table 1)? The former might be reasonable as it solves the ladder fuel/density issues, but the latter, because it would open up the stand to increased sun, heat, and wind, would actually increase fire danger.

\* We’re told that the proposal would maintain or improve lynx habitat on up to 15,800 acres. First, the use of “up to” means the actual acres could be anywhere from 1-15,800 acres – specifics please. Second, since the proposal will increase road miles; do virtually nothing to close/completely decommission the 167 road miles mentioned; include 26,500 acres of functional clearcuts; and negatively impact lynx habitat for 10-20 years, it’s obvious that the above claim of “improvement” is a total fabrication (ie. Lie).

\* The proposal includes pruning western white pine (WWP) to reduce blister rust, reduce competition from shade tolerant conifers, and plant rust resistant stock “after disturbance” on “up to” 25,700 acres. While this sounds generally advisable, it all depends on the meaning of “after disturbance”, which may or may not be a good thing. Specifics please. The same problem occurs with the “up to” language. Surely the Forest Service must have a better “ball park estimate” of what is actually intended.

\* The proposal to restore “up to” 2400 acres of whitebark pine stands (WBP) by controlled burn and caching of disease resistant seeds, is the sort of minimalist thinking that’s simply indefensible given the critical importance of this species to everything from Clark’s nutcrackers to grizzly bears.

Given that most such restoration efforts would occur at higher elevations away from roads, trails, and people, they could simultaneously increase the ecosystems carrying capacity for grizzlies, while reducing conflicts with humans and attractants at lower, more settled, elevations. Therefore, the Flathead Forest, in cooperation with other National Forests and Glacier National Park needs to begin an ecosystem-wide effort to restore WBP on multiple tens of thousands acres per year through burning, planting of disease resistant seedlings (primary), and caching of seeds (secondary). The Flathead should report on historic acres of WBP in the Mid-Swan, and include a comprehensive restoration plan spanning the next 20 years.

\* Before the Forest addresses a “fire return interval on up to 46,700 acres” (67% of the entire Mid-Swan) it needs to provide documentation that such a widespread deficit actually exists. From the project maps provided, it appears that substantial areas of the Mid-Swan are subalpine, where fire intervals are 100-200 or more years, and a fire deficit is unlikely.

\* Finally, the proposal says that it will “ Address special departure and convert overabundant cover structural stage combinations, in particular subalpine fir young forest multistory, to other cover types and structural stages on up to 34,100 acres. (Reduce number of small patches by combining or linking adjacent stands. Break up large homogenous patches through mechanical treatments and controlled burns).”

 First, the Flathead needs to write its proposals in clear, plain English – not USFS “Gobbletygook” as we see in the first sentence. Anytime you have to add two sentences to explain what you said in the first sentence, you’re on the wrong track. Second, I was under the impression that “subalpine fir young multistory” could be important to lynx – a listed species. Finally, the last two sentences appear to contradict each other. The first one says there are too many small patches and they’ll be linked to create large ones. The second says you want to break up those same large homogenous patches into smaller ones through mechanical treatments (Logging to the rest of us) and controlled burns. So which is it?

III. Reduce Risk from Fire in the WUI (Wildland Urban Interface):

\* Reduce the risk from fire on up to 31,100 acres within the WUI. As noted earlier, this is more than 44.5% of the entire Mid-Swan project area, and clearly suggests an arbitrary and artificial inflation of the WUI boundaries as a way for the Flathead Forest to justify a more interventionist “active management.” The WUI boundaries need to be completely redrawn to reflect actual urban areas, subdivisions, and clusters of multiple homes.

\* As noted earlier, and in my comments on the Crystal Cedar Proposal (See Attachments) the vast majority of recent research on fire hardening in the WUI indicate that the most effective strategies are those occurring within 100 yards or less of dwellings, not those miles away on National Forest lands. In most cases, this will involve thinning/harvest on private lands at homeowner expense, not on NFS public lands at public expense. Yet 57% of the “Vegetation Treatments” involve some form of thinning/logging on public lands – with no reasonable justification.

IV. Connected Actions:

\* “Approximately 60 miles of new roads would be constructed to implement proposed activities.” Absolutely Not – until such time as the Flathead has fully complied with road closures and decommissioning under Amendment 19, there can be zero justification for adding to the backlog and further fragmenting grizzly bear and lynx habitat. The Flatheads premature efforts to ignore A19 are based upon an NCDE grizzly delisting that has been put off for an unknown period, and a legally and scientifically deficient NCDE Conservation strategy that won’t hold up under scrutiny by the courts.

\* “Additional temporary roads may also be constructed and would be built on existing road prisms wherever possible…Upon completion of the project, these roads would be made impassable so there would be no net increase to the baseline for motorized route access and no net decrease to the baseline for secure core.”

 Absolutely Not. This is the same “loophole language” included in the new Forest Plan to arbitrarily allow a maze of new road-building under the false claim that it’s “temporary”, when, in fact, “projects” can be 5 years in length – plus extensions. As noted in my comments/objections to the new Forest Plan and Grizzly Amendments (See Attachment) any grizzly bear, but particularly females that are displaced from their home ranges for 5+ years will suffer negative consequences to their feeding, breeding, security, and reproduction (USFWS 2014) – all in violation of the Endangered Species Act (ESA).

And as noted in the same comments/objections, “impassable” routes under the new Forest Plan do not get to be removed from motorized route density, and do not get to be counted as Core. That only happens if the routes are completely decommissioned, culverts pulled, and they no longer function as a road or trail – Period!

V. Forest Plan Amendments “Needed”:

\* Amendments to NRLMD Standard VegS5

(1) The proposal would amend the above Standard to allow – “…non-commercial thinning, regeneration harvest, and prescribed fire in snowshoe hare habitat when existing levels of stand initiation snowshoe hare habitat exceed recommended levels (Based upon Manager Preferences no doubt) and either (a) existing levels of mature, multi-story habitat are below recommended thresholds, or (b) insufficient temporarily unsuitable habitat…is available to meet future lynx habitat requirements…”

\* The above is based on research by Kosterman et al. (2018) dealing with female reproductive success, habitat availability, and habitat connectivity – none of which is provided to the public, even though it’s being used as a justification to violate the Endangered Species Act, Section 9.

\* This proposed amendment admits on P: 21 that it would reduce snowshoe hare habitat “temporarily” (10 – 20 years) – which is anything but temporary, and would damage the habitat of Threatened lynx populations, again in violation of ESA Section 9 since much of the Swan is designated as Critical Habitat.

\* Skyles (2013) shows a lynx connectivity corridor running down the heart of the Swan and it should be clear that reducing snowshoe hare and lynx habitat for one to two decades, adding 60 miles of new roads, failing to decommission existing roads as required by Amendment 19, thinning 2400 acres and “regenerating” (Clearcutting) 26,500 acres, will not provide the connectivity called for by Kosterman et al. (2018).

Amendments to NRLMD Standard Veg6:

 Here again, the Flathead proposes to conduct thinning and regeneration harvest in mature, multi-story habitat for two reasons:

\* “First, in areas where that mature, multi-story habitat is at risk from severe fire, selective thinning will be conducted to promote to promote stand resiliency.” While this may have some merit, it depends on how “selective” the thinning actually is and how widespread it is. However, it once more promotes the false USFS narrative in support of more logging that fuel is the primary driver of fire size, intensity, and severity, when in fact it’s heat, drought, and wind (See Attachments).

\* “Second, in areas with sufficient and well-connected mature, multi-story habitat and insufficient stand initiation snowshoe hare habitat (Kosterman et al. 2018), thinning with regeneration openings would be used to create snowshoe hare habitat within mature habitat and new winter foraging opportunities in areas with the potential to serve as female lynx core use areas.”

What both of these “reasons” have in common, is that they’re looking for excuses to log in mature, multi-story habitat – the big trees valued by loggers - which is known to be a key lynx habitat type. Therefore, it’s likely that such activity will not only reduce snowshoe hare habitat, but that of the Threatened lynx as well. In addition, the referenced “regeneration openings” (Clearcuts) will open up these key stands to more heat, drought, and wind – and therefore fire. It’s clear that the Flathead needs to rethink both of these potential amendments and craft solutions that do not reduce hare habitat for 10-20 years, negatively impact lynx Critical Habitat in violation of the law, and potentially increase fire danger.

Public process & Constitutional problems:

\* The Mid-Swan Landscape Restoration and Wildland Urban Interface Project says: “Because of the large amount of research regarding forestry practices and methods, if you cite literature in your comments, please provide us with a complete bibliography and a copy of referenced materials.”

Since the Forest Service has easy access to nearly every forestry article available and the staff, funding, and time to quickly locate them – while the average citizen may not – the apparent requirement of “a copy of referenced materials” is a transparent attempt to thwart public comment and an effort to set up arbitrary hurdles to the public process.

The U.S. Constitution, Amendment I says: “Congress shall make no law respecting the establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.”

Note that nowhere does it condition any of these rights on providing a well-staffed Forest Service with “a copy of referenced materials” and as such, this arbitrary requirement must be removed from the current proposal, and all USFS documents in the future.

Thank you again for the opportunity to comment. I look forward to seeing my issues and concerns addressed and incorporated into future Mid-Swan documents.

Sincerely,



References Cited

Squires, John R., et al. 2013. Combining Resource Selection and Movement Behavior to Predict Corridors for Canada Lynx at Their Southern Range Periphery. Biological Conservation 157 (2013) 187-195.

USDA Forest Service. 2017. Volume 1 – Wildlife Section 3.7 of the Final Environmental Impact Statement for the Forest Plan, Flathead National Forest. December, 2017.

USFWS. 2014. Final Biological Opinion on the Effects to Grizzly Bears From the Implementation of Proposed Actions Associated With Plan of Operations for the Montanore Minerals Corporation Copper/Silver Mine. March 31, 2014. 161 pp.

NOTE: All of the above references, along with copies, have been provided to the Flathead in my comments on the 2017 Final Flathead Forest Plan and Grizzly Bear Amendments, or are clearly in USFS possession already.