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Comments: [External Email]Comments on the Lolo NF Forest Plan Revision Proposed Action

Attachment 1: Connectivity

Connectivity

Edward Monnig

E.O. Wilson in his seminal book *The Theory of Island Biogeography* posits that larger areas and habitats with greater connection to similar habitats have greater species richness than smaller isolated areas. Smaller disconnected areas can also experience greater species extirpation because of reduced genetic diversity and inbreeding. Connecting smaller areas to other similar habitat with secure corridors expands island sizes and presumably fortifies species survival. This awareness drives an interest in secure connections across landscapes for wildlife, particularly for those species listed under the Endangered Species Act. Numerous practical questions related to species needs, habitat management, and designation of connectivity areas and corridors remain for the Lolo National Forest.

Species habitat connectivity across larger landscapes depends on 3 factors: unobstructed passage through connectivity corridors; appropriate habitat in the connectivity corridor especially for species with longer transit time or likely with young; and security in the connectivity area from predators/humans and other disturbance.

Unobstructed Passage

A classic example of obstructed passage is a road culvert that prevents fish passage. The Lolo Forest must be credited with engaging the Montana Department of Fish, Wildlife, and Parks and non-profit groups to eliminate such barriers on a consistent basis in the past. Objectives FW-CON-OBJ 01 and 02 commit to continue this work, and we hope these objectives are a minimum.

The initial connectivity assessment provided in the Revised Assessment indicates that some of the most significant passage obstacles for terrestrial species are related to highways and associated development. Although these landscape features are not generally controlled by the Forest Service, we recommend an approach below for Forest involvement in this issue.

Connectivity Habitat

The most complex connectivity features to analyze and manage are the habitat requirements within connectivity areas or corridors. The Lolo National Forest like much of western Montana is noted for its variety of species supported by a variety of habitats. The need for connectivity between these habitats will vary by species as discussed in the Revised Assessment analysis of connectivity, but the overarching principle remains: this variety of species must be supported by a variety of habitat configurations

Because of the number of species, a presumed analysis of habitat and connectivity needs requires the use of a broad-scale (coarse filter) habitat analysis for groups of similar species and additional analysis for individual at-risk species. This approach would simplify the analysis process because analyzing for each of hundreds or thousands of species is not feasible or required by the 2012 Planning Rule.

The Revised Assessment proposes using a coarse-filter connectivity modelling process pioneered by the Custer-Gallatin Forest. Species are to be divided into groups depending on combinations of the following characteristics:

- * 4 habitat associations: closed canopy forest, open canopy forest, non-forest, habitat generalist;
- * 2 types of response to human activity: sensitive and neutral; and
- * 2 maximum dispersal distances: 10 kilometers and 50 kilometers.

Combinations of these factors results in an analysis matrix of 16 categories of wildlife species: (4 habitat classes) times (2 disturbance response classes) times (2 dispersal classes).

Even this simplified analysis is challenging. As reported by the Revised Assessment (page 150), [ldquo]At the time of writing this Assessment, only initial results for closed-canopy species are available with the full connectivity analysis ongoing. Initial results for closed-canopy species are presented in Figure 24.[rdquo] It is worth noting that of the species of concern on the Forest only the fisher is a closed canopy species. The connectivity needs of closed-canopy species are likely the most difficult to satisfy on the Lolo because of the desired forest structural characteristics that are indicated by the natural range of variability on the Forest and degree of canopy manipulation envisioned by the Proposed Action.

The Revised Assessment provides no findings or conclusions from the maps presented in Figure 24. Fundamental questions remain for these closed-canopy species. How many corridors/connectivity landscapes are needed? How big? Where? How is the habitat configured?

And most fundamentally this 16-matrix analysis cannot answer the basic question: how are the habitat and connectivity needs of individual species associations to be balanced against the needs of others species. I believe that the connectivity needs of different species association and the tradeoffs between them will only be resolved by applying the basic principle: the viability of the variety of species on the Lolo, requires a variety of habitat conditions in core areas and connectivity areas. This distribution of conditions must be guided by an ecosystem management approach that considers the natural range of variability.

Although the connectivity and general habitat needs of most species across the Forest can be accommodated with a broad-scale/coarse filter ecosystem approach it is clear in discussions of connectivity that the proverbial [ldquo]elephant in the room[rdquo] is the grizzly bear and its secure connectivity needs. The Lolo is defined as a critical link between the Cabinet-Yaak; the Flathead NF and Glacier NP; and the Bitterroot ecosystems. The connectivity and habitat needs of the grizzly bear will garner the greatest public and agency attention and judicial oversight.

In terms of biological and structural habitat requirements species like the grizzly bear, lynx, and wolverine are adapted to varied conditions, including early seral conditions like brush fields, young forests, and insect-and rodent-laden coarse woody debris on the forest floor of older forests. These varied conditions will also accommodate a very high percentage of all species on the Lolo National Forest. Maintaining these varied conditions will require some management. As noted in the Proposed Action (FW-VEGF-DC-10), the Forest should be working toward a desired condition of less medium-sized closed canopy forest overall as well as disaggregation of this condition and increased landscape-level ecosystem diversity and heterogeneity; in short, more old forest and more young forest in patches of varying size. As a side note, the Flathead National Forest Plan envisions managing grizzly bear core habitat (and presumably connectivity habitat) for a similar variety of habitat conditions and forest age classes. I believe this approach on both the Flathead and the Lolo National Forests is warranted.

I concede that working for less closed canopy forest may work against the interest of the fisher, but an ecosystem management approach does not and cannot maximize any single interest or species. Ecosystem

integrity implies a balance of many parts that approximates a natural range of variability. And with insistent repetition I recall the basic principle: maintaining a variety of terrestrial species requires a variety of forest conditions in connectivity areas and elsewhere.

Secure Connections

Providing access to critical habitat areas to increase [ldquo]landscape-level ecosystem diversity and heterogeneity[rldquo] (FW-VEGF-DC-10) often challenges managers. It requires access, often motorized. The third critical element in well-functioning connectivity corridors is security from human incursion and disruptive activities affecting security-sensitive species such as grizzly bears. This security concern is often seen as a barrier and hindrance to management access. Maintaining a balance between access and habitat security requires careful analysis of the actual utility of the existing road network, eliminating unneeded roads, and limiting new road installations. We cannot accept carte blanc that more system roads are always necessary for functions like fire suppression and vegetation management. More frequent use of temporary roads, more robust closure of existing closed roads, and more diligent monitoring of closed roads can reduce the security issues.

Recommendations:

1. Provide a variety of habitats in connectivity corridors and across the Forest to provide for a variety of terrestrial species.
2. To address the habitat security issue, the Forest plan should more aggressively advocate the use of temporary roads for management in critical habitats. Practice has shown that well-considered and designed temporary roads can be less expensive than constructing and maintaining permanent system roads. Such temporary roads could allow access to otherwise inaccessible areas to accomplish a variety of management goals and objectives and desired conditions on the landscape.
3. Emphasize the reduction of road density in recently acquired lands.
4. Continue to remove barriers such as culverts that interfere with aquatic species passage, especially to spawning areas.
5. Provide plan components that reflect the best science on the ecological effects of varied habitat in connectivity corridors and balance security requirements on the landscapes with the overall need to provide diverse ecological conditions.
6. Work with State and Federal highway agencies and State and Federal wildlife agencies to identify the best potential wildlife highway-crossing areas considering the quality of species habitat adjacent to the highway and the presence of natural wildlife travel ways. Advocate for installation of overpasses and underpasses or other means to direct wildlife to safer crossing locations.

And last I note some vacillation in the Forest Plan in reconciling the benefits and the challenges of connectivity between forest conditions such as old growth or refugia. At times the Proposed Action seems to endorse a maximalist approach to connectivity, and at other times the Proposed Action and the Revised Assessment and Appendix 3 of the Proposed Action acknowledge the possible difficulty posed by too much connectivity of vegetative conditions because of the risk of extreme contagion in disturbance events like fire and insect outbreaks. More effort is needed to acknowledge and reconcile these perspectives and provide clear direction in the plan components addressing the connectivity issue.

Attachment 2: Suitable/Unsuitable

Suitable/Unsuitable for Timber Production

Edward Monnig

The terms suitable and unsuitable for timber production must be clarified in the Revised Plan and the management implications for lands classified as [ldquo]unsuitable for timber production; timber harvest can occur[rdquo] must be better explained. Over one million acres, almost half of the Lolo National Forest, is in this latter management category of [ldquo]unsuitable but harvest can occur.[rdquo] Most members of the public, and even many Agency employees, would conclude that If you are cutting/harvesting trees, putting them on a log truck, hauling them to a mill where they are processed into lumber, you are producing timber. How then can this be allowed on lands unsuitable for timber production?

In the worst case, members of the public who are opposed to most if not all forms of forest management, find in this terminology further proof that the Forest[rsquo]s true motivation is to produce as much timber as possible regardless of the condition and limitations of the land. It is incumbent on the Forest to explain the reasons beyond the purely economic to harvest trees. I provide suggested language below to explain these issues in the final Forest Plan.

The requirement that lands be categorized as suitable or non-suitable is an unfortunate dichotomy enshrined in the basic regulatory language governing the forest planning efforts. Forests do not cleanly divided into two categories of suitability and non-suitability for timber production in a way that corresponds to the public[rsquo]s common understanding of the concepts. And when the Proposed Action does try to provide a more detailed explanation of various categories, it provides Tables 21 and 22 which are convoluted and unintelligible to most. Simplified explanations of these and many other tables in the Proposed Action is needed.

Most basically the Forest must do a better job of differentiating timber production from timber harvest. This is more than a semantic exercise. Projects, such as the Woods Gulch fuels treatment project in the Rattlesnake NRA and projects in the Pattee Canyon Recreation Area have been mired in confusion over these terms.

I offer, for your consideration, the following text (in italics below) in the spirit of clarifying the complexity of these terms.

What is timber production?

Timber production is a long process that can start with preparing a site to grow trees (possibly burning or scarifying/roughing up the soil); planting trees or seeding the area; pre-commercial thinning the stand of trees if the young trees grow in too densely; monitoring the growth rate of the trees; and at a point when the rate of tree growth is slowing down, harvesting some or all of the trees. And the process begins again on a sustainable basis intended for unlimited future generations of forest.

The National Forest Management Act of 1976 requires the Forest Service in its Forest Plans to identify lands that are suitable for sustained timber production based on physical characteristics such as soil type, precipitation, and slope angle, and as well as regulatory restrictions and other resource needs.

Not all lands with suitable growing conditions are necessarily identified as suitable for timber production. For example, timber production is prohibited in Congressionally-designated Wilderness regardless of the physical characteristics of the land. In designated Wilderness Congress has mandated that natural processes shall dominate, and timber harvest is prohibited.

As a second example, in high-use recreation sites, investment in the long process of timber production is not practical and would conflict with other uses of the site. Therefore, such sites are also classified as unsuitable for timber production. However, it may be necessary to remove (harvest) some hazard trees for public safety, to reduce fuels and create defensible spaces in the event of fire, etc. If commercially viable, sale of these trees is permitted. To allow this process the Forest Plan would classify these sites as [ldquo]unsuitable for timber

production but harvest may occur.[rdquo] Timber harvest, in this recreation example, is just the cutting and removal of trees for other resource reasons and not as part of a sustainable timber production process.

In summary harvest activity can be done as part of a sustainable timber production process on suitable sites or this activity can be allowed to protect or enhance resource values on other sites. Congress, in drafting the National Forest Management, understood this distinction and the possible need to cut trees on some lands classified as unsuitable.

There are over a million acres of land on the Lolo National Forest classified as [ldquo]unsuitable for timber production; timber harvest can occur.[rdquo] These sites generally grow trees, but often not at growth rates or under conditions that qualify them as suitable for long term, sustainable timber production. Nonetheless on some of these lands there are multiple reasons for timber harvest such as fuel reduction on lands protected too long from natural fire processes, restoration of diverse habitats, or cooperation with neighboring landowners. The reasons for this activity are disclosed to the public during the project development process. This activity must also comply with Forest Plan direction governing timber harvest on lands unsuitable for timber production as provided by forest wide plan components in the FW-UTH section.

In summary the Forest Plan should emphasize the importance of this extensive swath of [ldquo]unsuitable[rdquo] lands for maintaining sustainable ecological processes on the Forest. The Plan should provide specific plan components for managing the portion of the Forest that is classified as [ldquo]unsuitable for timber production/harvest allowed[rdquo] including plan components governing mechanical treatment as well as prescribed fire on these lands. There are few plan components in the Timber section regarding timber harvest on unsuitable lands. Because this classification covers almost half of the LNF, the Forest Plan should present a separate plan component section for this issue and these lands. This FW-UTH section should explain the nuances of timber production suitability and the implications for timber harvest using language such as provided above. Cross reference this language in other sections of the Plan. Even though these non-suitable lands have other overlays such as management area direction, the question of the use of tools such as timber harvest on unsuitable lands is contentious and potentially confusing. With half the forest in this management category, it is critical that the public and future generations of agency employees clearly understand the plan components, expectations, and allowances for land so classified.

Attachment 3: The Crosswalk

The Connections Between

The Proposed Action, The Preliminary Need to Change, The Revised Assessment, and

Appendix 3 of the Proposed Action and the Implications for

Alternatives to the Proposed Action

Edward Monnig

The Proposed Action builds on several important predecessor documents including the Preliminary Need for Change, and the Revised Assessment. It is necessary to review how well the Proposed Action incorporated the findings of these other efforts.

One of the salient findings of the Revised Assessment is the significant drift of the current forest conditions away from the natural range of variability. This is particularly apparent in the warm-dry forest type and the warm-moist

forest type. The significance of this divergence remains difficult for the public to appreciate because the Proposed Action lists only Desired Conditions on many variables without referencing current conditions. That the Forest considered including both sets of information in the Proposed Action tables is tantalizingly hinted in Proposed Action Table 1 which is mistakenly titled, "[dquo]Existing and Desired Conditions for Conifer Forest Dominance[hellip][rdquo]"; yet the table only provides desired conditions. Providing both sets of data would be very helpful for the public and future practitioners as a benchmark for progress. It is unlikely that future practitioners are going to search out the Revised Assessment to do their own comparisons. Likewise having both existing and desired condition data on a variety of variables would bolster the arguments in the Preliminary Need for Change.

The review provided by Proposed Action Appendix 3 (Proposed and Possible Actions and Potential Management Approaches) also provides a basis for a need to pursue more aggressive action if the Forest is going to make significant progress in restoring ecosystem integrity to the landscape. The LRC assumes that the review provided in Appendix 3 of the Proposed Action was crafted after the main text of the Proposed Action was prepared. Thus the findings presented in Appendix 3 should affect the modification of the Proposed Action or development of alternatives to the Proposed Action.

The suggestions in Appendix 3 for more mechanical treatment of various types prior to burning are well documented as much more effective at moderating eventual wildfire than burning alone or thinning alone. Scroll down to the last photo in the article linked below. A telling landscape photo shows the after-wildfire effects of various treatments on The Nature Conservancy land in Oregon.

<https://blog.nature.org/2022/03/14/wildfire-resilience-treatments-work/>

As shown in this last photo, the difference in fire behavior on lands that were not treated, lands that were thinned only, and lands that were thinned and then treated with prescribed fire is stark. Although this is a single incident, research by the Forest Service Fire Lab confirms the value of combined thinning and burning. Mark Finney of the Missoula Fire Lab can provide well tested advice. His work demonstrates that prescribed fire alone and thinning alone are not nearly as effective as the combination.

I have seen fuels mitigation work completed and targets counted with little apparent remediation of fuel conditions that would affect fire behavior. Forest monitoring efforts must absolutely account for and assess effectiveness of these treatments.

Appendix 3 makes a strong case for the need for landscape scale treatments beyond the scale of much of what the Forest has generally attempted in the past. This need and the current condition of much of the Lolo National Forest argue for the consideration of a more aggressive "[dquo]Managed Restoration Emphasis Alternative[rdquo]. I include the word "[dquo]managed[rdquo] because there is a constituency that argues that the only thing we need to do is get out of the forest, wrap up the roads, and let nature heal itself. We will leave that perspective for the Forest to argue and not repeat the counterarguments here.

Under a Managed Restoration Emphasis Alternative, the Forest would design a program to address the scale of work needed on the Lolo National Forest if we are to respond to the ecological needs implied in the Revised Assessment, the Preliminary Purpose and Need, and Appendix 3 of the Proposed Action. Pages 4 and 5 of Appendix 3 cast some doubt on whether Agency management can accomplish enough to affect the change needed. Notwithstanding this skepticism I ask the Forest to design an alternative to take us as far as possible down the road of ecological restoration.

I realize that budgets to do this scale of work are not entirely forthcoming. However, the public (and Congress) need to know what is required at this point. This information will be particularly salient as you begin the process of identifying alternatives to the Proposed Action and comparing the effects of these alternatives. This

comparison is, of course, particularly challenging in the face of climate change, increasing human populations, and demands for Forest services and products.

The Preliminary Need for Change also outlines scores of needs, yet it is not clear how many of these are translated into the Proposed Action. One example is noted. On page 17 (4.3.6 Designated Areas), the Preliminary Purpose and Need identifies [ldquo](a need for[mdash]) plan content for recommended wilderness that reflects the influence of management activities conducted by American Indians prior to westward expansion.[rdquo]

Two questions follow:

1. Why is this need only identified for MA-2, (Recommended Wilderness)? Is it not also appropriate for MA-3 and MA-4, if not MA-1 and MA-5 also?
2. Why is this need to learn from aboriginal activities not reflected in Proposed Action plan components identified for MA-2 (and the other MA[rsquo]s)?

The general public and the agency would benefit from a crosscheck that identifies where the needs identified in a Final Need for Change document are addressed in the Proposed Action plan components. This index could look like a version of the Readers Guide (Appendix 11) and would cross reference the Forest identified needs and the relevant plan components. Preparing such an index could reveal the unmet needs in the Proposed Action and prompt the revisions of the Proposed Action or development of alternatives.

In summary an ambitious course of action must be identified for the Forest in this revised Forest Plan. I also concede that your task is made more difficult because the data base to support this work is only partially complete. However, Forest Inventory and Analysis data and the Region 1 Vegetative Mapping data (VMap) and the general scientific literature are better than we have ever had. And so you must continue the Agency efforts that analyzed the status of Upper Columbia River Basin ecosystems (including the Lolo NF) and enshrined the findings in the Interior Columbia Basin Ecosystem Management Project (known by those consumed by its preparation as [ldquo]ice bump[rdquo]). Even though much of this work has been modified, it still provides a strong philosophical underpinning for an ecosystem management approach the Forest is undertaking. Carry on.

Attachment 4: Fire Refugia

Fire Refugia

Edward Monnig

The term [ldquo]fire refugia[rdquo] is used several times in the draft Proposed Action and in Appendix 3 of the draft. There is no clear definition of what constitutes a [ldquo]fire refugia[rdquo] in either the Proposed Action text or in its glossary. At first reading the concept seems at odds with oft-cited description of many forest and grassland habitats in western Montana as [ldquo]fire dependent.[rdquo]

Once again we have a terminology problem in which the technical language put forth by scientists and Agency representatives is at odds with common usage by public. Most people would associate the terms refugia and refuge, as used, for example, in the phrase [ldquo]an elk refuge[rdquo] as a place where something can exist in a protected status without human disturbance.

In the absence of clearer definitions, it is unclear to the reader whether the Forest is describing a refuge for fire or a refuge from fire.

In the scientific literature cited in the proposed action there seem to be at least two descriptions of what might

constitute a [ldquo]fire refugia.[rdquo] These two definitions are reflected on page 148 of the Revised Assessment and should be included with fuller explanation in the Plan.

The first type of refugia is an area that appears to have escaped several fires that have occurred at [ldquo]regular[rdquo] intervals in the surrounding forest matrix. Stand conditions include old fire-intolerant trees (e.g. tree species characterized by thin bark), multiple canopy layers, and significant coarse woody debris on the forest floor. Identifying an area of forest as a refugia of this type requires determining that it has indeed escaped several fires that have affected the matrix of surrounding forest stands and not just a single escape of a recent fire because of some random (stochastic) event like shifting wind or a control action. The draft Proposed Action provides no evidence or inventory of such refugia on the Lolo NF. However, the concept and description of fire refugia certainly overlaps the discussion of old growth forests, and it seems that the management principles for some types of old growth would overlap the management of this type of [ldquo]fire refugia.[rdquo]

The maintenance of this type of old growth/refugia requires the management of the surrounding forest habitat that does not qualify necessarily as old growth/refugia at the present time, but perhaps could in the future. This perspective is embedded in the following statement from Camp et al. (1997, see full citation in the Revised Assessment):

[ldquo]Current management goals of increasing amounts and connectivity of old, refugia-like forests for the benefit of species associated with late-successional habitat increase the risk of insect and pathogen outbreaks and catastrophic wildfires".

In their study of fire-intolerant old forest (refugia) these researchers noted that protecting refugia characteristics from the possibility of catastrophic disturbance requires that the surrounding forest matrix be managed to reduce the severity of disturbance. Appendix 3 of the Proposed Action also reiterates these similar needs for protective management of old-growth stands in a list of cautionary actions on pages A3-9 and A3-10.

The second type of refugia noted in some scientific literature are the stands of old forest and large trees that are maintained by frequent low-intensity fire and other low intensity disturbance. Example include old forests in the warm-dry Ponderosa cover type, as well as some of the warm-moist Larch cover types. These open-grown, old growth Ponderosa and Western Larch stands exist because they are protected from stand replacement fire by frequent low intensity fire and other management. To rephrase the terminology of refugia, these stands are in fact [ldquo]fire-dependent fire refugia.

The LRC does not believe that there is any utility in providing separate plan components for fire refugia beyond the plan components for managing old growth, including fire-dependent old growth. We also believe that it is critical that the Plan differentiate the old growth stands comprised of mostly fire-intolerant species and the old growth in fire-dependent stands. The LRC believes that managing both of these types of forest conditions is well covered by plan components covering fire adapted ecosystems and old growth forest conditions.

Recommendations

1. Do not use the term [ldquo]fire refugia[rdquo] or, at a minimum, downplay the phrase except possibly to note that the term is used by some researchers to explain how some discrete forest areas comprised of fire intolerant species may have escaped multiple, potentially high-intensity fires because of site conditions including favorable topography and/or high moisture locations (e.g. riparian areas) and/or treatment/disturbance of surrounding stands that reduce the probability of catastrophic disturbance.
2. Focus on the need to reintroduce some types of disturbance to the forest landscapes to protect residual old forest sites and reduce the chance of high severity fires especially where they are ecologically inappropriate in scale and intensity.
3. Explain that a high percentage of forested landscapes on the Lolo NF require management with fire and other

tools to recreate conditions that allow fire to play its long-standing role as a mediator of sustainable ecosystem conditions. And affirm that the Forest has concerns that the term [ldquo]fire refugia[rdquo] could distract and confuse people on this last important message and indirectly convey the message that [ldquo]no fire[rdquo] is the desired condition across large swaths of the Forest.

4. Explain that some of our rarest old forest conditions are Ponderosa Pine and Western Larch types where over many millennia low-intensity fire contributed to the old forest conditions by protecting these stands from fuel accumulation and high-intensity fire. Explain that these stands have been negatively affected by protection from fire and by some types of past timber harvest. And if some insist on using refugia terminology for these dry forest types call them more accurately [ldquo]fire-maintained fire-refugia.[rdquo]

In summary, use the term [ldquo]fire refugia[rdquo] with full ecological explanations of the variety of conditions on our forested landscape or use it not at all.

Attachment 5: Partnerships

Partnerships

Edward Monnig

The Proposed Action[rsquo]s recognition of the importance of partnerships with Local, State, and Tribal governments, other Federal Agencies, non-profit and business groups, and various user groups is an advance from the original Forest Plan. These partnerships will extend the reach and effectiveness of Forest Service management on issues such as creating fire-safe communities, building wildlife connectivity corridors, protecting at-risk species, and connecting people with nature. These comments focus on the need to enhance environmental awareness in all segments of the surrounding communities through partnerships with non-profit organizations that work on environmental education.

In several plan components the Proposed Action notes the need for partnerships to further a goal of connecting people with nature.

Goal (FW-RSUP-GO-02) provides an expectation that:

[ldquo]The LNF works with special use permit holders to deliver interpretation and education messages that instill and appreciation for natural and cultural resources and promotes conservation and stewardship.[rdquo]

Desired Conditions (FW-PUB-DC-01 and 02) state:

01. Conservation education, interpretive, and visitor information programs provide opportunities for visitors, youth, and communities to appreciate and understand the Lolo National Forest[rsquo]s natural and cultural resources and learn how to conserve those resources for future generations.

02. Opportunities to connect people to nature and open space, including underserved populations, are available to promote the use of the Lolo National Forest for the improvement of physical and mental well-being.

Goals (FW-PUB-GO-03 and 04) state:

03. Formal and non-formal educators in local communities understand natural resource issues and partner with the forest to deliver place-based outdoor learning opportunities.

04. Youth have lifelong opportunities to learn, and a continuum of experiences that span from discovery to awareness and connection, to knowledge, to action are provided. The youth of local communities have a personal connection with the natural and cultural resources of the forest and a personal conservation ethic through their recreation experiences.

And more..

In communities adjacent to the Lolo National Forest there are several non-profit education groups whose mission is to connect people of all ages to the natural world. They stand ready to partner with the Forest Service and engage local communities including the underserved. Unfortunately, the work of these organizations continues to be stymied by the Forest Service special-use-permit regulations. These non-profit education organizations are treated like any commercial operation and given severe use restrictions that limit the number of participants in their educational programs. Instead of feeling welcomed as a partner with the Forest Service, they are constrained by regulations that work at cross-purposes to the goals and desired conditions provided in the Proposed Action plan components cited above.

I realize that the Forest Service intends their Special Use Permit regulations to minimize user conflicts in heavily used sites. However, Forest should take a proactive approach with educational non-profits to design programs in locations and at times that do not conflict with other users and other values of the LNF. Artificially constraining involvement of these organizations will not allow the Forest to meet the laudable goals outlined above.

Attachment 6: Invasive Species

Invasive Species

Edward Monnig

The Proposed Action's recognition of invasive species, both terrestrial and aquatic, as significant stressors on natural processes is a notable advance from the original Forest Plan. Counteracting these species impacts requires partnerships between the Forest Service, the State and County agencies, private organizations, and concerned citizens.

The Forest Service can have relatively little effect on the introduction of aquatic invasive species, except to insure its own activities do not contribute to their spread. I applaud the State of Montana for its a robust boat screening and inspection effort for recreationists to prevent the spread of aquatic invasive species.

Although forest management activities can be a major vector of terrestrial invasive species, recreational use of the forest has become a bigger player in the spread of invasive species, particularly non-native vegetation. The author and his wife recently camped at Twin Bridges Recreation Area, a BLM/State of Idaho site on the Salmon River. We arrived late and when we woke in the morning we realized we were camping in the middle of a huge goat weed infestation. Anyone who has trail-biked or walked pets off paved roads from Nevada to Idaho can testify to the damage that the thorny seed heads can inflict (see photo below). These and other species equally destructive to our ecosystems are coming our way, often transported by recreationists.

To counteract such threats, we need early detection and aggressive control action.

The revised Forest Plan must contain an objective that every recreation site on the Forest be inspected at least once per year for the presence of new invaders. If new invasive species are detected, Forest Plan components must commit the Forest to vigorous control action to eliminate these new invaders and slow the spread of

established State-listed non-native plant species.

The possible spread of invasive species must also be a serious consideration in managing dispersed recreation, such as dispersed camping.