# OBJECTOR'S NOTICE OF OBJECTION, STATEMENT OF ISSUES AND LAWS, AND REQUESTED REMEDIES But the ring, in the first metabolishman of the grant are in-

# NOTICE OF OBJECTION

April 10th, 2021

Shane Jeffries, Forest Supervisor Ochoco National Forest
3160 NF Third Street 3160 NE Third Street Prineville, OR 97754

RE: Blue Mountains Biodiversity Project's objection to the Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project Draft Decision Notice and Finding of No Significant Impact and Environmental Assessment

Dear Objection Reviewing Officer,

Blue Mountains Biodiversity Project (BMBP) hereby formally submits the following objections to the Ochoco National Forest's Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project (aka "Sunflower Grazing Reauthorization") Environmental Assessment and Draft Decision Notice and Finding of No Significant Impact. BMBP has secured the right to submit objections and thereby participate in the pre-decisional administrative review process for this project. BMBP has submitted timely written scoping comments regarding this project and extensive comments on the Draft Environmental Assessment, including field survey sheets and photographs from our surveying the affected area. \* See attached.

#### **Decision Document**

Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project Environmental Assessment and Draft Decision Notice and Finding of No Significant Impact

# Date Decision published

March 12<sup>th</sup>, 2021

Responsible Official

Shane Jeffries, Forest Supervisor, Ochoco National Forest

### **Description of the Project**

The Ochoco National Forest Service has selected in its entirety the Proposed Action, including the following proposed management actions. Therefore, this objection focuses on the Proposed Action, as specified in the Draft Decision Notice. The Decision is summarized as follows: "Table 1 summarizes management activities of the Proposed Action [on p. 3 of the Draft Decision Notice]. Activities proposed generally include reauthorization of grazing, changes in numbers of pastures, changes in livestock management requirements (i.e. grazing rotation, timing of grazing), construction or reconstruction of rangeland improvements, planting of riparian hardwoods, felling trees into and along stream channels and stream restoration activities, including head-cut repair. Also, wildlife habitat improvements of road closures and conifer thinning would occur. Appendix A contains the Resource Protection Measures (RPM), design elements, and monitoring described in the Final EA, while Appendix B contains maps of the spatial locations of the management activities and actions." (Draft Decision Notice, pp. 2-3)

The following are specific management actions to be taken under the Proposed Action that are specified in Table 1 that we find to be excessive regarding potential negative impacts to the ecosystem, wildlife, soils, riparian functioning, hydrologic flows, and/or water quality or that are both excessive management and very costly, considering the already very degraded conditions and increasing climate change inevitably making these allotments even more unsuitable and unsustainable for continued cattle grazing: providing forage at the current rate; high allowed numbers of AUMS and cow/calf pairs of up to 200 cow/calf pairs (now averaging 120), up to 800 cow/calf pairs (now averaging 600 pairs), and 563 cow/calf pairs (now averaging 400 pairs) for the three allotments; long allowed seasons of cattle grazing use up to April 15th or May 1st all the way to October 31st although current season target or average seasons of use are usually shorter (May 15 or June 1st to August 15th to September 15th, likely due to lack of enough forage by early fall, as we witnessed in early September); 106 planned water developments; 61.5 miles of new fencing; and approximately 1,966 acres of thinning out juniper up to 20.9" dbh with fir and pine to be thinned at less than 12" dbh. Not included in Table 1 is planned leaving of livestock ponds in their current condition that are currently directly blocking stream channels and blocking natural stream flows, which we also oppose.

#### Location

The project area is located on the Paulina Ranger District of the Ochoco National Forest (ONF), approximately 17 miles northeast of Paulina, Oregon, along the eastern edge of the ONF. The project area encompasses three grazing allotments (Dry Corner, Sunflower, and Wind Creek) covering 51,530 acres of National Forest System Lands.

Appellant's Interests

Blue Mountains Biodiversity Project has a specific interest in this decision, which has been expressed through participation throughout the NEPA process. BMBP supporters visit much of the affected area for hiking; camping; relaxing; bird, wildlife, and wild flower viewing; photography; hunting; and more. The value of the activities engaged in by BMBP volunteers, supporters, and staff would be damaged by the implementation of this project.

BMBP is a non-profit organization that works to protect Eastern Oregon National Forests. Staff, volunteers, and supporters of BMBP live in various communities surrounding the Ochoco National Forest and use and enjoy the Forest extensively for camping; hiking; drinking water; hunting; fishing; general aesthetic enjoyment; gatherings; viewing flora and fauna; gathering forest products; and other purposes, such as solar eclipse viewing.

## Request for meeting

BMBP requests a meeting with the Forest Service to discuss matters in this objection and seek resolution of concerns through negotiation before the Ochoco Forest Service makes a final decision on the Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project (aka the Sunflower Grazing Reauthorization Project).

# Specific issues addressed in this objection

NEPA (National Environmental Policy Act) violations, including: proposing actions inconsistent with achieving the stated purpose and need for the project; failure to provide an adequate range of alternatives; failure to adequately analyze direct, indirect, and cumulative impacts of the project; inaccurate use of the science; failure to disclose the methodology used; and planning large scale conifer thinning outside the scope of allotment renewal without adequate analysis of effects.

Violations of the National Forest Management Act (NFMA) and the Ochoco Forest Plan, including failure to provide for population viability for multiple Management Indicator species and other wildlife species and violations of the Ochoco Forest Plan, as well as relying on a very outdated Forest Plan to

justify allotment grazing reauthorization.

Potential violations of the Ochoco National Forest Plan include not updating suitability assessment for livestock grazing under current science and conditions; failing to adequately consider and uphold other multiple use values under the Forest Plan other than livestock grazing; and violations of Forest Plan standards, including INFISH/PACFISH requirements and Northern goshawk protections under the Eastside Screens; and violations of Forest Plan standards for avoiding detrimental impacts to soils and ensuring that permittees meet grazing standards, including stubble heights.

Endangered Species Act violations include contributing to a trend toward federal uplisting for the following species: Threatened-listed Gray wolf; Threatened-listed Mid-Columbia steelhead trout; Sensitive Columbia Spotted frog; Sensitive Redband trout; and various Sensitive-listed wildlife species

and plants known to be or suspected to be within the project area.

Potential Clean Water Act violations include failure to ensure water quality and water flows in

streams, springs, and areas with livestock ponds.

We also express concerns regarding potential violation of adequate prevention measures for preventing invasive plant introduction and dispersal under the Region 6 invasive plant management plan, the excessive public costs of the many developments planned to enable current and future unsustainable livestock use of the area, and foreseeable impacts to climate stability.

# BMBP objects to the Sunflower allotments grazing reauthorization for the following reasons:

# I. The Sunflower Grazing Reauthorization Project violates the National Environmental Policy Act

The Sunflower Grazing Reauthorization project violates the National Environmental Policy Act in the following ways: inconsistency with the stated "purpose and need" of the project; failure to provide an adequate range of alternatives; failure to adequately analyze direct, indirect, and cumulative impacts of the project; failure to take the requisite "hard look" at project impacts required by NEPA; inaccurate use of the science; and failure to disclose methodology for key analysis assumptions; and proposing large scale thinning outside the scope of grazing reauthorization without adequate analysis of potential effects.

# Inconsistency with the stated purpose and need of the project

The Sunflower Grazing Reauthorization project (aka Sunflower project) is not consistent with all the purpose and need goals as expressed in the Environmental Assessment. The Sunflower project includes the following statement that constitutes the purpose and need for the Sunflower Grazing Reauthorization project in the Environmental Assessment (EA) page 3: "Grazing....

The purpose of NEPA review and evaluation of livestock grazing reauthorization in the Sunflower Cluster is to meet the stipulations of the Recission Act (1995) and ensure livestock grazing would be

managed in a manner that maintains or moves National Forest grazing allotments towards the objectives, desired conditions, and standards and guidelines identified in the Ochoco National Forest Land and Resource Management Plan (Forest Plan).

Review and evaluation of livestock grazing on the Sunflower Cluster allotment is needed because:

- \*Where consistent with other multiple use goals and objectives, Congressional intent is to allow grazing on suitable lands....
- \*National Forest lands within the Sunflower Cluster are identified as suitable for domestic livestock grazing in the Forest Plan and continued domestic livestock grazing is consistent with the goals and objectives of the Forest Plan.

\*It is Forest Service policy to make forage available to qualified livestock operators from lands suitable for grazing consistent with the Forest Plan....

\*It is Forest Service policy to contribute to the economic and social well-being of people by providing opportunities for economic diversity and promoting stability in communities that depend on range resources for their livelihood....

Wildlife Habitat Improvement: Thinning and Road Closures

... The proposed road closures, conifer thinning and riparian restoration activities in the Sunflower project area are needed to:

\*Address the increase in conifer (primarily juniper) encroachment to restore/improve the native

bunchgrass and shrub understories;

- \*Promote elk and deer distribution on their seasonal ranges on National Forest System lands and reduce impacts to adjacent private lands where they damage crops and pastures and limit the State's ability to manage populations;
- \*Restore/improve the native bunchgrass and shrub communities;

\*Provide more secure calving and fawning habitat for elk and deer;

\*Reduce sediment delivery into tributaries leading to critical steelhead habitat; and

\*Provide an economically sustainable transportation system.

(from the final Environment Assessment for the Sunflower project, pp. 3-4)

The need for action should be based on current habitat conditions within the project area, which we field-surveyed and documented in our survey sheets and photographs, incorporating our field survey sheets and photographs of conditions on the ground as part of our comments. Comments are quoted and cited below based on the page number of our typed comments on the EA where they can be found.

Examples of our comments on the inconsistency of proposed management actions with the stated purpose and need for the Sunflower Grazing Reauthorization project, regarding encouraging the continued grazing of livestock at current levels not being consistent with: promoting stability in communities that depend on range resources for their livelihood; promoting elk and deer distribution and reducing impacts to adjacent private lands; reducing fine sediment delivery to streams; improving wildlife habitat in general; and regarding reduction of dense small trees over time, as cattle over-grazing promotes the dense in-growth of small young trees by eliminating competition with the trees from higher, denser grasses and shrubs:

"Encouraging the continued grazing of livestock on very marginal and degraded grasslands, when creeks are drying up is <u>not</u> "promoting stability in communities that depend on range resources." (EA p. 5) This is especially true with the foreseeable advent of more high temperatures and droughts and more intense wild fires under escalating climate change. Yet the Forest Service fails to analyze climate change effects and their interactions with the existing situation of severe extensive over-grazing, long-term riparian

damage, and evidence of what were probably historically perennial creeks drying up. If the cumulative effects of climate change and continued livestock grazing in this area were analyzed in depth, there would be a clear indication that continued livestock grazing authorization is not advisable. Local ranchers are bound to face more and more cut-backs in the grazing season and numbers of cattle that can be supported and other limiting grazing requirements under adaptive management due to increased loss of forage to drought and fires and lack of sufficient water due to drought, high temperatures, and the continued high demand on water by the cattle. This situation can lead to increasing economic loss to the ranchers and eventual abandonment of the allotments, at which point the existing riparian area destruction, loss of plant diversity and abundance, soil impacts, and stress on wildlife populations will be even more intense and much harder to recover and restore." (BMBP comments p. 4, last par. & par. 1, p.5)

"Elk and deer would be far better distributed on these allotment areas if they had enough to eat. It's no wonder that we were not seeing elk or deer or even much sign of elk (none) or deer use (few tracks) because there is not enough forage left for them due to the excessive cattle consumption of already marginal available forage. Cattle are at least as big a factor in poor deer and elk distribution and excessive fine sediment loading in streams as roads, if not more." (BMBP Comments, p. 5, par. 2)

"Continued livestock grazing in these allotments would be contrary to, and not compatible with wildlife habitat improvement, as the ecological destruction from cattle is too severe and entrenched to be remedied by the proposed alternative." (BMBP Comments, p. 9, 1st par.)

"So much proposed tree felling up to 20.9" dbh cannot be explained by a goal of increasing forage for cattle—especially as livestock over-grazing creates the conditions for dense young tree growth, so such growth would likely re-grow if the grazing pressure isn't discontinued completely. There are clearly too many cattle in the allotments over too long a season still planned." (BMBP Comments, p. 16, last full par.)

# Resolution of property of the parties of the partie

BMBP has commented on its objection to the Ochoco National Forest's (ONF) Sunflower Grazing Reauthorization project in comments (see quotes and citations above.)

We request that, to be consistent with the purpose and need for the project, conditions on the ground,

and restoration goals, that the Forest Service:

\*Re-plan and re-write the proposed action to be consistent with the purpose and need stated for the project in a new Environmental Assessment or Environmental Impact Statement or choose a modified alternative that is consistent with the stated purpose and need for the project as follows: not permitting grazing re-authorization or significantly reducing cattle numbers to sustainable levels for the land and requiring a shorter grazing season which avoids the early Spring reproductive season of April and May and prohibits fall grazing beyond September. These measures would allow for greater ranching community stability and for more available forage for elk and deer to help with their distribution. Such a modified alternative should also include needed active riparian restoration and exclusion of cattle from perennial creeks and intermittent stream sections that are damaged and not meeting riparian management objectives.

Failure to provide an adequate range of alternatives

The Sunflower Grazing Reauthorization Environmental Assessment included an inadequate range of alternatives.

Our related comments explain our position and include the following:

"The Forest Service is obviously not considering and analyzing in depth a full range of alternatives when both the No Action alternative alone and the Proposed Action alternative alone are only expected to improve upland plant vigor 'slowly' and over an unspecified 'long' term. Riparian plant conditions are expected 'to improve at a more accelerated rate than alternative 2' through the No Action alternative—i.e. from removing all cattle after two years. Yet riparian functioning in the most damaged creeks would likely be slower without some active restoration, so the obvious solution would be to combine cessation of livestock grazing after the required two years with proposed active riparian restoration such as needed head-cut repair, wood placement to stabilize stream channels, and riparian hardwood planting, as well as closing road segments damaging RHCAs. This would be the environmentally preferred alternative." (BMBP Comments, pp. 9-10)

"Following is a summary of some of our key concerns about the proposed action and reasons to support either the No Action alternative 1 or a modified alternative we are suggesting that would phase out livestock grazing over two years as with No Action and include proposed active riparian restoration, but not the extensive conifer thinning planned unless it is reduced to the typical non-commercial size limit of 9" dbh and is done by hand only, with more limited scale based on specific criteria relating only to riparian area restoration.

The No Action or a modified No Action/Active Riparian Restoration Only alternative would have far greater benefits for riparian recovery and for the viability and recovery of Threatened Mid-Columbia steelhead trout, Sensitive Redband trout, Sensitive Columbia spotted frog, and other aquatic life and riparian plant biodiversity than the proposed continuance of livestock grazing under Alternative 2 and would better meet Forest Plan standards, PACFISH/INFISH objectives, and Clean Water Act requirements. The Environmental Assessment analysis supports our contention that recovery of riparian areas would occur more quickly (and more completely) with no continued cattle grazing. This leads to the logical conclusion that existing fish populations of Redband trout and downstream Threatened Mid-Columbia Steelhead trout, Columbia Spotted frogs, and other aquatic life and riparian-associated Sensitive plants would be more likely to survive and would benefit more from either the No Action alternative, or better yet, our proposed modified alternative that incorporates both no reauthorization of the grazing permits plus the proposed riparian restoration activities planned for Alternative 2. Such a modified alternative is such an obvious solution to the existing riparian condition problems as an environmentally preferred alternative that the Forest Service should have thought of it, based on staff and public concerns, and proposed this as an alternative. The EA instead has an inadequate range of alternatives." (BMBP Comments, p. 1, par.s 2 & 3)

"It is easily foreseeable that proposed grazing management changes would not be sufficient, as there is so much long-term livestock damage to these creeks and the Forest Service is not proposing a definite reduction in cattle numbers, changes in the season of use, or keeping cattle completely out of the riparian areas." (BMBP Comment pp. 7-8)

"Beneficial effects rather than further impacts to Mid-Columbia Steelhead trout, Redband trout, and Columbia Spotted frog is another reason for our support for the No Action alternative or our suggested

"No grazing reauthorization plus riparian restoration" alternative over the Proposed Action alternative."

(BMBP Comment, p. 11, par. 3)

"The Forest Service is failing to provide a full range of alternatives, as the first two alternatives considered but eliminated from detailed study are viable alternatives in keeping with the purpose and need of improving upland and riparian conditions. Actually, an alternative that suggests dramatically reduced utilization is <u>not</u> covered by the proposed alternative as claimed. Alternative 2 proposes variable seasons of use without significantly reducing cattle numbers, and therefore not reducing overall utilization levels. It's not at all clear that the proposed action would actually sufficiently reduce the season of use in riparian areas or other sensitive areas. This is perhaps the reason why the Forest Service characterized this as only "implied" by the analysis of the proposed action. The suggested reduction or elimination of the season of use in riparian and other sensitive areas is by no means guaranteed by the proposed action. Existing severely degraded riparian areas give reason for concern that there should be mandated reduction or elimination of the season of use in riparian areas or other sensitive areas to allow for their full recovery" (BMBP Comments, p. 9)

"We support the No Action/No Grazing alternative or No Action combined with Riparian Restoration Only as an alternative that does not reauthorize livestock grazing but still proposes needed active restoration for riparian areas. Decommissioning of livestock-related water developments and removal of fencing no longer needed could be included as part of our proposed modified alternative. The most destructive water developments and fencing could be prioritized for decommissioning if there is not enough current funding for immediate removal, with scheduling for removing defunct water developments and unnecessary fencing later. Road closures and decommissioning could also be included, although these are not usually planned for livestock grazing reauthorization and could be done separately. This alternative would not include non-commercial thinning without significant tree size and acreage reduction, confining it only to riparian restoration objectives, as discussed above. Such changes and limitations would turn this into a credible "Wildlife Habitat Improvement Project", which could be the name of this proposed modified alternative. This new alternative would still provide local jobs." (BMBP Comments, p.8)

### Resolution

BMBP has commented on its objection to the ONF's inadequate range of alternatives in the Sunflower Grazing Reauthorization Environmental Assessment and requested a broader range of alternatives in our comments. See our comments quoted and cited above.

To remedy this problem, the Forest Service would either have to reissue a new Environmental Impact Statement offering a full range of alternatives as required by NEPA for public review and comment, or better meet our concerns by choosing our modified alternative or the No Action alternative, as expressed in related comments as follow:

"We support the No Action/No Grazing alternative or No Action combined with Riparian Restoration Only as an alternative that does not reauthorize livestock grazing but still proposes needed active restoration for riparian areas. Decommissioning of livestock-related water developments and removal of fencing no longer needed could be included as part of our proposed modified alternative. The most destructive water developments and fencing could be prioritized for decommissioning if there is not enough current funding for immediate removal, with scheduling for removing defunct water

developments and unnecessary fencing later. Road closures and decommissioning could also be included, although these are not usually planned for livestock grazing reauthorization and could be done separately. This alternative would not include non-commercial thinning without significant tree size and acreage reduction, confining it only to riparian restoration objectives, as discussed above. Such changes and limitations would turn this into a credible "Wildlife Habitat Improvement Project", which could be the name of this proposed modified alternative. This new alternative would still provide local jobs." (BMBP Comments, p.8)

# Failure to adequately analyze direct, indirect, and cumulative effects

The Sunflower Grazing Reauthorization Environmental Assessment demonstrates failure to adequately analyze environmental effects of the project in various parts of the document, including omissions and distortions such as the following addressed in our comments:

"The non-commercial thinning proposed sounds more like a subsidized hand-out to the allotment permittees to increase forage for cows than a justified wildlife habitat improvement. Such thinning is not likely to increase forage significantly under current grazing pressure. The proposed conifer negative thinning impacts to wildlife, carbon storage, and recreational values would need to be analyzed in depth. Non-commercial thinning up to only 9" dbh by hand only is much less damaging and less controversial than planning to thin up to 21" dbh, which is equivalent to a timber sale regarding the loss of live trees for wildlife, long-term snag and log habitat, recreational values, and carbon sequestration. Such foreseeable impacts need to be analyzed and avoided. We suggest limiting any non-commercial thinning to 9" dbh maximum, greatly scaling down the acreage on which this occurs by confining it to situations of meadow and riparian hardwood encroachment, and setting clear criteria for where, under what circumstances, at what degree of intensity, and why this would take place—or drop the non-commercial thinning with this project." (BMBP Comments, p. 8, par. 4)

"It sounds like planned non-commercial thinning with tracked excavating equipment with booms would be likely to exceed the Forest Plan limit for detrimental soil impacts of 20% of an activity area when calculated combined with existing detrimental soil impacts. Further, [the] EA does not analyze in depth the effects of intensive thinning up to 20.9" dbh over larger areas for specific areas." (BMBP Comments, p. 10, 4th par.)

"The Table 2 findings of continued adverse bank stability and fine sediment loading for the No Action alternative fails to account for mid to long-term benefits from plant regeneration on stream banks from no cattle grazing and passive recovery, which would gradually stabilize stream banks and reduce bank instability and fine sediment delivery. Cattle trampling around riparian areas causes bank instability and excess fine sediment loading in streams. No cattle use would also contribute to a better width to depth ration for stream channels and help reduce stream temperatures due to far less grazing and hedging of riparian hardwoods." (BMBP Comments, p. 11, par. 3)

"Limit tree felling to only limited wood placement in stream channels and floodplains and limited non-commercial thinning only up to 9" dbh by hand, only where trees are encroaching on riparian hardwood habitat or moist meadows. There should be detailed analysis justifying any tree felling or non-commercial thinning. Just citing project design criteria is not enough for NEPA requirements or to allay our concerns." (BMBP Comments, p. 15, last par.)

Re: inadequate cumulative effects analysis:

"Encouraging the continued grazing of livestock on very marginal and degraded grasslands, when creeks are drying up is not "promoting stability in communities that depend on range resources." (EA p. 5) This is especially true with the foreseeable advent of more high temperatures and droughts and more intense wild fires under escalating climate change. Yet the Forest Service fails to analyze climate change effects and their interactions with the existing situation of severe extensive over-grazing, long-term riparian damage, and evidence of what were probably historically perennial creeks drying up. If the cumulative effects of climate change and continued livestock grazing in this area were analyzed in depth, there would be a clear indication that continued livestock grazing authorization is not advisable. Local ranchers are bound to face more and more cut-backs in the grazing season and numbers of cattle that can be supported and other limiting grazing requirements under adaptive management due to increased loss of forage to drought and fires and lack of sufficient water due to drought, high temperatures, and the continued high demand on water by the cattle. This situation can lead to increasing economic loss to the ranchers and eventual abandonment of the allotments, at which point the existing riparian area destruction, loss of plant diversity and abundance, soil impacts, and stress on wildlife populations will be even more intense and much harder to recover and restore." (BMBP comments, pp. 4-5)

"The costs of new water developments, water development reconstruction, miles of new fencing, and active riparian restoration far outweigh any benefit to the ranchers. The public and the ecosystem bear the expense. These ecological expenses include continuing destruction of fish populations; and loss of: water retention; water and forage for wildlife; natural hydrologic and riparian functioning; plant diversity; and recreational and scenic values. Beyond all this, the cattle also contribute to the severity of climate change effects through both methane gas emissions and depletion of water, loss of water retention, and soil and plant impacts that decrease the viability of wildlife species. Elk also spend energy and lose otherwise suitable habitat by actively avoiding cattle." (BMBP comments that specify ecological expenses/impacts not considered in any depth in the EA analysis, p. 7, 4th par.)

### Resolution:

BMBP has commented on its objection to the ONF's failure to adequately analyze direct, indirect, and cumulative effects of the Sunflower Grazing Reauthorization project on a range of receptors. See our comment quotations and citations in the paragraphs above regarding inadequate analysis.

To resolve this objection, an EIS needs to be prepared that adequately analyzes direct and indirect effects of the Sunflower Grazing Reauthorization project, and cumulative effects of the project in combination with past, ongoing, and reasonably foreseeable future actions to NEPA standards, with a public comment period to enable informed public comment and agency review.

### Inaccurate use of the science

There are some instances in the Sunflower Grazing Reauthorization EA of analysis not reflecting the full range of best available science or using science inaccurately. Examples of failure to accurately using science from our comments:

"What exact field evidence studies support full recovery of streamside plants through cattle dispersal and riparian restoration without full exclusion fencing or reduction in numbers of livestock and shortening

the season of use? The benefits of no cattle use to both riparian and upland plant diversity are well documented for cattle exclusion and passive recovery. It is not clear (or discussed in the analysis) that cattle dispersal due to management actions proposed would come close at all to full riparian and upland recovery even in the long-term." (BMBP comments, p. 11, 1st par.)

"It seems highly questionable to assume that potential for effects to infiltration rates and soil structure by such heavy animals with intensive grazing habits and tendency to congregate only occur during the growing season, not during the later summer dry season recurrent use of riparian areas and continued upland grazing. It is also dubious whether these effects 'are relieved by freeze-thaw processes the following winter.' This does not account for the legacy impacts of cattle trampling and compaction of soils from year to year and over decades compounding the intensity of impacts. This seems like a biased selection from the science and a misrepresentation of the science as a whole." (BMBP Comments, p. 13, 1st par.)

### Resolution

BMBP has commented on its objection to the ONF's failure to use science accurately. See our comment citations and quotations in the paragraphs above.

In order for the Sunflower Grazing Reauthorization project to comply with NEPA, the Forest Service needs to use the science accurately, with professional integrity in analysis in a new EIS available for public comment. This would better and more accurately inform public comments, agency review, and decision-making.

# II. The Sunflower Grazing Reauthorization project violates the National Forest Management Act

The Sunflower Grazing Reauthorization project violates the National Forest Management Act in the following ways: failure to ensure the viability of Management Indicator and other species, including Northern goshawk, failure to ensure current suitability of the allotment lands for continued livestock grazing, and potential violation of Forest Plan standards and guidelines for riparian area (RHCA) protection, grazing standards, and protection of soils through proposed actions. The Forest Plan requires adherence to INFISH requirements, including moving toward attainment of Riparian Management Objectives in forest areas, and protection guidance for the Northern goshawk under the Eastside Screens requirements.

Failure to ensure the viability of Management Indicator Species (MIS)

Our comments noted many areas of analysis in which the Sunflower Grazing Reauthorization EA failed to demonstrate that the viability of Management Indicator (MIS) and Sensitive species would be ensured with project implementation. Species of concern for protection of viability include the following Management Indicator species: Redband trout, and Rocky Mountain elk, as well as Northern goshawk, which has protection guidance under the Eastside Screens.

We are also concerned about failure to ensure viability of Sensitive and Threatened-listed species on the Forest, including Threatened-listed Gray wolf; Threatened-listed Mid-Columbia River steelhead trout; Sensitive-listed Wolverine; Sensitive Columbia Spotted frog, and Sensitive-listed Redband trout.

The Forest Service has legal responsibilities to protect the viability of Management Indicator species,

but not to reauthorize livestock grazing no matter what the cost to other values protected by the Forest Plan.

Examples of how our comments express these concerns regarding the failure to ensure the viability of Management Indicator and other species:

"The 'Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project' Environmental Assessment's Proposed Action (alternative 2) would reauthorize cattle grazing on Ochoco National Forest public/treaty lands on the Paulina Ranger District despite widespread severe over-grazing and long-term riparian damage to creeks and springs from current and past livestock grazing. Continued cattle use would set back badly needed recovery of riparian areas, natural plant cover and diversity, and soil integrity and fertility. Continued cattle grazing of the allotments area, even with proposed adaptive management and limited riparian restoration, threatens the continued viability of the Sensitive Redband trout populations and Sensitive Columbia Spotted frogs, downstream Threatened Mid-Columbia Steelhead trout, and many Sensitive or declining bird species, including the Greater Sage Grouse, as well as harming meadow habitat for Sensitive native Bumblebee species and a Sensitive butterfly species. The planned continued grazing of 1,563 cow and calf pairs would still remove needed forage for native Mule deer, Rocky Mountain elk, and Pronghorn. The long grazing season, which the Forest Service does not promise to reduce, eliminates nutritious spring forage for wild ungulates and wild horses, summer forage, and late fall forage very important to deer and elk winter survival. Many Sensitive plants, especially riparian plants, would also be at risk from continued cattle grazing. Water quality and hydrologic flow recovery would also be significantly impeded by continued cattle grazing even with planned adaptive management and limited active riparian restoration." (BMBP Comments, p. 1, par. 1)

3)"Based on the EA analysis, wildlife species that would be threatened by the proposed cattle grazing reauthorization (and some by the proposed extensive tree thinning up to 16-20.9" dbh) but would benefit from the No Action or modified No Action/Active riparian restoration alternative include: the Sensitive Greater Sage grouse; the Sensitive Silver-bordered Fritillary butterfly; the Sensitive Western bumble bee and the Morrison bumble bee; the Sensitive Fir Pinwheel snail; Management Indicator species Rocky Mountain elk and Mule deer; Focal species Pronghorn, wild horses, and Northern goshawk; Sensitive Lewis' woodpecker; raptors; and a number of Birds of Conservation Concern, including: Flammulated owl; Calliope hummingbird; Olive-sided flycatcher; Willow flycatcher; Loggerhead shrike; Sage thrasher; Brewer's sparrow; and Sage sparrow; as well as Focal bird species: Chipping sparrow; Nashville warbler; Red-naped sapsucker; Red-eyed vireo; Yellow warbler; MacGillivray's warbler; Western wood peewee; Warbling vireo; Vesper sparrow; Lincoln's sparrow; and Savannah sparrow. This is an extraordinarily high number of Sensitive-designated species, Focal species, and species in decline (which also would include Threatened Steelhead trout, Sensitive Redband trout, Sensitive Columbia Spotted frog, and many Sensitive plant species) that would potentially be harmed by the proposed action. This is especially egregious in that the No Action alternative should have been identified as the Environmentally preferred action or a modified No Action/riparian restoration alternative should have been proposed, identified as the Environmentally preferred action, analyzed in depth, and offered as the Proposed Action. Planning for potential continued decline of so many Sensitive wildlife species demonstrates Forest Service disregard for the Endangered Species Act goal of preventing upward trends in species listed—for example, from Sensitive to Threatened and from Threatened to Endangered listing. The agency's willingness to sacrifice so many wildlife species also shows disdain for the National Forest Management Act's goal of ensuring the viability of all native vertebrate species." (BMBP comments, p. 2, #3)

"Beneficial effects rather than further impacts to Mid-Columbia Steelhead trout, Redband trout, and Columbia Spotted frog is another reason for our support for the No Action alternative or our suggested 'No grazing reauthorization plus riparian restoration' alternative over the Proposed Action alternative." (BMBP comment, p. 11, par. 3)

"Drop all planned thinning within goshawk Post Fledging Areas. Northern goshawks select for denser forest habitat for nesting and foraging. Apparently the planned thinning in goshawk PFAs is ignoring (and not discussing) Greenwood [Greenwald] et al.'s literature review on goshawk habitat requirements. Goshawks need dense forest, not just large trees, snags, and down wood. Along with other accipiter hawks, they evolved for a dense forest habitat niche and are out-competed by raptors and large owls for prey if the forest is opened up too much by logging. Goshawks also need at least 60% canopy closure for nesting and at least 40% for foraging, based on the science. The proposed thinning is so unrestricted that there is no guarantee that areas thinned would remain suitable goshawk foraging or nesting habitat." (BMBP comments, p. 16, 2<sup>nd</sup> par.)

See our additional comments supporting our objection re: the need to maintain the viability of MIS species under NFMA at p.5, 2nd par. and p. 9, 1st par.

### Resolution

BMBP has commented on its objection to the ONF's failure to provide for viability of Management Indicator and other species in the Sunflower Grazing Reauthorization project. See our comment citations and sample quotes in the above paragraphs.

Resolution of this issue would include:

Re: Northern goshawk:

\* No commercial-size logging in suitable primary goshawk habitat and PFAs and any non-commercial size thinning (up to 9" dbh) should be dropped or limited to less than one quarter of a PFA and not occur within the nest core 30 acre buffer.

Re: deer and elk:

- \* Retain more overall tree density and deer and elk cover—especially by dropping thinning in microhabitat patches where greater density would naturally occur, such as at higher elevations, within RHCAs, on North to Northeast aspect slopes or in hollows, and in wildlife connectivity corridors. \*Road density should be reduced to at least the Forest Plan standards and objectives for elk. Re: Redband trout and Columbia Spotted frog: See recommended remedies below, under Forest Plan violations-INFISH. Riparian and aquatic species in particular would benefit from no continued livestock grazing combined with active riparian restoration.
- \*Other species mentioned in our comments would likely benefit from much less livestock grazing intensity (i.e. no livestock grazing or much smaller numbers, no livestock use or shorter seasons of livestock use than the average current seasons which avoid the early Spring reproductive season in April and May) and active riparian restoration to bring back native grasses, shrubs, and riparian hardwoods, including planting of native riparian hardwoods.

#### **Forest Plan violations**

Forest Plan violations in the Sunflower Grazing Reauthorization project include likely continued violations of Forest Plan standards by further setting back attainment of INFISH/PACFISH Riparian Management Objectives; not updating suitability of the land for livestock grazing based on current conditions; sacrificing other values and goals under the Forest Plan in order to perpetuate the single use of livestock grazing; failing to meet grazing standards (e.g. stubble height) and a disconnect between proposed actions and full use of the current best available science due to reliance on an outdated Forest Plan. Violation of Forest Plan standards also include potentially not adequately protecting Northern goshawk under the Eastside Screens and exceeding Forest Plan limits to detrimental impacts to soils.

# Violation of the Forest Plan Eastside Screens

#### **INFISH Violations**

Our comments on potential Forest Plan violation regarding failure to demonstrate adherence to Riparian Management Objectives clearly state our concerns. See BMBP comments quoted and cited below:

"The 'Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project' Environmental Assessment's Proposed Action (alternative 2) would reauthorize cattle grazing on Ochoco National Forest public/treaty lands on the Paulina Ranger District despite widespread severe over-grazing and long-term riparian damage to creeks and springs from current and past livestock grazing. Continued cattle use would set back badly needed recovery of riparian areas, natural plant cover and diversity, and soil integrity and fertility. Continued cattle grazing of the allotments area, even with proposed adaptive management and limited riparian restoration, threatens the continued viability of the Sensitive Redband trout populations and Sensitive Columbia Spotted frogs, downstream Threatened Mid-Columbia Steelhead trout, and many Sensitive or declining bird species, including the Greater Sage Grouse, as well as harming meadow habitat for Sensitive native Bumblebee species and a Sensitive butterfly species...Many Sensitive plants, especially riparian plants, would also be at risk from continued cattle grazing. Water quality and hydrologic flow recovery would also be significantly impeded by continued cattle grazing even with planned adaptive management and limited active riparian restoration." (BMBP comment, p. 1, par. 1)

"Creeks are also drying up outside of exclosures, where the only lush, healthy forage and hardwoods remain. This level of intense forage and water consumption by cattle alone is in violation of numerous Forest Plan standards and goals, such as for higher residual stubble heights, less browsing on riparian hardwoods, the forage to be reserved for wildlife, and Riparian Management Objectives in general under PACFISH/INFISH to preserve fish habitat, riparian biodiversity, and ecological processes. Creeks in the allotments are clearly not meeting criteria for bank stability, sediment, width-to depth channel ratios, and riparian hardwoods. See our survey sheets and photos from sample riparian locations." (BMBP comments, p. 9, last par.)

"We're concerned that so much mechanized equipment use could contribute significant excess fine sediment to the channel, further erode banks, or otherwise degrade riparian conditions. What project design would be used to avoid these impacts?" (BMBP comment, p. 5, 3<sup>rd</sup> par.)

"All the severely damaged riparian areas outside exclosures are not moving toward Riparian

Management objectives under INFISH. "(BMBP comment, p. 7, 3rd par.)

"This is not that reassuring, the voluntary possibility that now the Forest Service might adjust the season [of livestock use to meet Forest Plan goals, objectives, and desired conditions, as well as the ability to meet utilization and] streambank alteration standards after many decades of apparently not doing so in these allotments. The riparian and upland forage conditions are far too degraded to just hope that the Forest Service staff (some of whom may be the same during the long period of neglect) will now be able to meet the Forest Plan goals, objectives, desired conditions, and utilization and streambank alteration standards without reducing the number of cattle greatly and shortening the season of use or removing the cattle altogether." (BMBP comment, p. 13, par. 2) (The brackets indicate a typo of missing text in the original comment.)

"We are strongly opposed to the conversion of any existing exclosures, including the Murray "Holding Pasture" to "holding" or "riparian" pastures for cattle use or any other livestock use. These exclosures are the only remaining examples of riparian vitality resembling conditions prior to livestock grazing. They are important reference condition or near reference condition areas to show how riparian areas in these allotments could flourish without livestock use. Allowing cattle into the exclosures defeats their purpose and degrades the last riparian reserves in the area for wildlife."

"Exclosure fences around spring development areas should not be 'small' but big enough to encompass the entire spring and ground water source riparian area to protect associated biodiversity. The planned exclosure around Cougar Creek is not big enough and should not be grazed at all. There is severe overgrazing by cattle all around Cougar Creek with very short stubble heights and areas of bare ground. (See our photos around Cougar Creek.) Cattle allotment planning needs to either fully exclude livestock from riparian areas except for small water gaps and exclude cattle from all damaged areas or else not reauthorize cattle grazing. It's extremely sobering to witness the extreme cattle damage in these allotments."(BMBP comments, p. 6, last two par.s)

"We oppose developing new spring sites for use by cattle and drilling any new wells for livestock. Springs are one of the greatest sources of natural biodiversity, along with other riparian areas such as creeks, seeps, and fens, and should no longer be allocated to and destroyed by livestock." (BMBP comments, p.7, par. 1)

### Resolution

BMBP has commented on the Sunflower Grazing Reauthorization project's potential violations of INFISH Riparian Management Objectives. See our comments cited and quoted above.

To resolve this objection, the Forest Service needs to:

\*Reduce the number of cattle allowed to use allotment pastures with degraded riparian zones, creeks, or springs, including but not limited to those pastures not meeting Riparian Management objectives and not showing a consistent upward trend toward meeting RMOs.

\*Shorten the season of use for pastures with riparian zones, including creeks, streams, and springs to exclude the early Spring season of April and May, to allow for full growth and re-seeding of riparian zones before any cattle grazing. Remove the cattle off pastures every season before too much plant

reduction and trampling of meadows, floodplains, stream channels, and streambanks occurs in the fall—i.e. before wet weather resumes, so no later than the end of August or mid-September.

- \*Prohibit any cattle entry or use within riparian exclosures and keep exclosure fencing maintained.
- "Exclosure fences around spring development areas should not be 'small' but big enough to encompass the entire spring and ground water source riparian area to protect associated biodiversity. The planned exclosure around Cougar Creek is not big enough and should not be grazed at all. There is severe overgrazing by cattle all around Cougar Creek with very short stubble heights and areas of bare ground. (See our photos around Cougar Creek.) Cattle allotment planning needs to either fully exclude livestock from riparian areas except for small water gaps and exclude cattle from all damaged areas or else not reauthorize cattle grazing..." (BMBP comments, p. 6,  $2^{nd}$  to last par.)
- "If the Forest Service is going to reauthorize the cattle grazing on the Wind Creek allotment (which we oppose), the North Wind Creek exclosure should be built before any grazing is allowed, not waiting to see if proposed grazing management changes result in the desired effects in North Fork Wind Creek. It is easily foreseeable that proposed grazing management changes would not be sufficient, as there is so much long-term livestock damage to these creeks and the Forest Service is not proposing a definite reduction in cattle numbers, changes in the season of use, or keeping cattle completely out of the riparian areas." (BMBP comments, p. 7, last par.)
- \*Drop development of any new spring sites and wells for cattle.
- "There needs to be a strict prohibition against causing any more impacts to groundwater-dependent ecosystems. Don't develop any more springs for livestock use. Instead use exclosure fencing around all existing springs and fens to keep livestock out and allow for the passive restoration of spring and fen riparian functions and biodiversity. Existing spring developments should be changed to meet proposed criteria or decommissioned and restored, as in the case of cattle removal." (BMBP comment, p. 15, 2<sup>nd</sup> par.)
- "Spring 'development' (destruction) for livestock should not be an exception that allows for fence construction within spring sites, seeps, or other ground water-dependent ecosystems, such as fens. These areas should have large exclosure buffers that encompass the entire affected zone—or better yet, close that part of the pasture to livestock use." (BMBP comments, p. 15, 3<sup>rd</sup> par.)
- \*"Trees cut for in-channel wood and floodplain roughness should not be trees contributing to shade (or bank stability) at all. Get rid of loopholes! Ground-disturbing equipment should not be used in RHCAs at all unless operating from a Forest Service open road. Except for loophole exceptions that allow for more riparian damage, we generally support proposed aquatic restoration criteria. There are science-based guidelines for most appropriate cross-channel angles for tree felling for large wood abundance." (BMBP comment, p. 14, 2<sup>nd</sup> to last par.)
- \*Drop commercial logging and heavy equipment use within RHCA buffers except for large wood placement up to 18" dbh for riparian restoration which retains conifers providing streambank stability and primary shading.
- \*Drop any planned heavy equipment stream drainage crossings.

# Failing to adhere to Eastside Screens Protections for Northern goshawks

Our comments on the EA regarding goshawk clearly explain our rationale for this objection:

"Drop all planned thinning within goshawk Post Fledging Areas. Northern goshawks select for denser forest habitat for nesting and foraging. Apparently the planned thinning in goshawk PFAs is ignoring (and not discussing) Greenwood [Greenwald] et al.'s literature review on goshawk habitat requirements. Goshawks need dense forest, not just large trees, snags, and down wood. Along with other accipiter hawks, they evolved for a dense forest habitat niche and are out-competed by raptors and large owls for prey if the forest is opened up too much by logging. Goshawks also need at least 60% canopy closure for nesting and at least 40% for foraging, based on the science. The proposed thinning is so unrestricted that there is no guarantee that areas thinned would remain suitable goshawk foraging or nesting habitat." (BMBP comments, p. 16, 2<sup>nd</sup> par.)

### Resolution

\* Keep noncommercial thinning away from recently active goshawk nest sites, including outside the 30 acre buffer around the nest—i.e. for goshawk nests occupied within the last 5 years.

\*"Drop all planned thinning within goshawk Post Fledging Areas..." (BMBP comment, p. 16, 2<sup>nd</sup> par.)

# Road system management:

Our related comments support planned road closure and decommissioning and also propose more effective closure and decommissioning methods than have usually been used on the Ochoco National Forest:

"While we support closure and decommissioning of ecologically damaging, unnecessary, or redundant roads, rocks and berms often fail to prevent continued ATV or truck traffic. The post and pole gates are often destroyed or modified for easy access. The Forest Service should use strong metal gates for system roads and fully decommission hydrologically connected and otherwise ecologically damaging roads. Preventing continuing resource (life source) damage and hydrologically stabilizing the road should be required, not be optional. We ask that all ecologically damaging roads, overgrown roads, and redundant roads identified for closure be closed permanently. As many as possible of the damaging roads should be fully decommissioned or scheduled officially for future decommissioning if funding is not available currently." (BMBP comments, p. 8, 3rd par.)

# Potential Violation of Soil Protection Standards

Our comments explain our objection:

"The proposed action would increase already extensive detrimental soil impacts to levels that would likely exceed Forest Plan standards, while the No Action or modified No Action/Active riparian restoration alternative would greatly decrease detrimental soil conditions and more quickly restore riparian areas and plant biodiversity. The Environmental Assessment analysis supports our concern that existing detrimental soil impacts likely already violate the Forest Plan standard limit and would definitely perpetuate violation of the Forest Plan 20% of the total activity area standard after implementation of Alternative 2." (BMBP comments, p. 2, #2)

<sup>&</sup>quot;Re: Table 2, regarding detrimental soil impact calculation for Alternative 2, in many cases much more

than 20 feet (10 feet on each side of the drainage) is badly over-grazed, trampled, compacted, and/or contributing excess fine sediment to creeks. See our field survey photos showing wider expanses of detrimental soil conditions. This indicates Forest Service under-estimating of detrimental soil conditions from alternative 2." (BMBP comment p. 10, par. 2)

"The proposed action description for detrimental soil conditions in Table 2, pp. 18-19, fails to state whether or not detrimental soil conditions from the proposed action would cumulatively exceed the Forest Plan standard limit of 20% of an area or other relevant Forest Plan standards. The analysis also understates the scale of effects from alternative 2, with no survey of existing detrimental soil impacts, including upland overgrazed areas." (BMBP comments, p. 10, par. 3)

"It sounds like planned non-commercial thinning with tracked excavating equipment with booms would be likely to exceed the Forest Plan limit for detrimental soil impacts of 20% of an activity area when calculated combined with existing detrimental soil impacts. Further, [the] EA does not analyze in depth the effects of intensive thinning up to 20.9" dbh over larger areas for specific areas." (BMBP comments, p. 10, par. 4)

### Resolution

BMBP has commented on our objection that the Sunflower Grazing Reauthorization Project as proposed could violate Forest Plan soil protection standards. See our comments quoted and cited above.

To resolve this objection, the Forest Service needs to do the following:

\*Identify specific areas where extensive or intensive ground disturbing management is planned and, additionally, specific areas that already have existing high levels of ground disturbance and soil impacts approaching, equal to, or exceeding the 20% area limit for detrimental soil disturbance in the Sunflower Grazing Reauthorization project area. Then the overlap of planned extensive or intensive ground disturbance with existing high levels of detrimental soil impacts should be analyzed in order to identify areas where additional detrimental soil impacts should not be allowed.

\*Drop ground disturbance planned in areas which have already high degrees of detrimental soil impacts or sensitive soils making further extensive ground disturbance likely to lead to violation of Forest Plan standards for soil protection with proposed management. Sources of additional detrimental soil impacts can include continued livestock use of an area, ground disturbance from planned thinning, or soil impacts from planned riparian restoration actions.

\*Drop thinning of any steep slopes or areas within RHCAs to reduce potential erosion, loss of soil integrity, and potential sedimentation of creeks, if adjacent.

\*Drop any ground disturbing management in areas unlikely to meet Forest Plan standards for detrimental soil standards without further mitigation, as mitigation is unlikely to be 100% effective.

\* "Keep cattle out of lithosol habitat ("scabland") completely." (BMBP comment, p. 14, 2<sup>nd</sup> to last par.)

# Suitability of the Land for Livestock Grazing and Violation of Grazing Standards

Our comments express our concerns for these objections.

Re: Suitability of the land for livestock grazing:

"The 'Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project' Environmental Assessment's Proposed Action (alternative 2) would reauthorize cattle grazing on Ochoco National Forest public/treaty lands on the Paulina Ranger District despite widespread severe over-grazing and long-term riparian damage to creeks and springs from current and past livestock grazing. Continued cattle

use would set back badly needed recovery of riparian areas, natural plant cover and diversity, and soil integrity and fertility." (BMBP comment, p. 1, par. 1)

"The Sunflower allotment lands should no longer be considered suitable for domestic livestock grazing based on current extensive and intensive cattle grazing damage to riparian areas, plant diversity, forage abundance, soils, and associated water quality, hydrologic flows, and wildlife habitat. The Ochoco Forest Plan is very outdated, including in its designation of lands suitable for livestock grazing. The Sunflower allotment cluster area has had such extreme over-grazing for so long that the area likely will never fully recover for decades or meet Forest Plan standards and guidelines, including PACFISH/INFISH RMOs and newer stream assessment objectives without the complete removal of all cattle and the use of both active riparian restoration and long-term passive recovery made possible by cattle removal." (BMBP comment, p. 4, 2nd to last par.)

"Based on the maps of proposed grazing-related actions, it's clear that too many water developments are being used and planned for cattle, including new wells and new spring development and much water development reconstruction, for the area to be viable for cattle grazing. See Figures 2, 3, and 4." (BMBP comment, p. 8, 2<sup>nd</sup> par.)

"The provision of the current rate of forage for cattle, as proposed under Alternative 2 (see Table 1), is obviously unsustainable, as virtually no forage was left in both the Sunflower and the Wind Creek allotments (we didn't check the Dry Corner allotment) as of early September. Significantly, most of the cattle had already been removed, probably due to the lack of forage and diminishing water availability. The cattle are consuming far more than their share (assuming that they should have a share at all), with nothing left for fall forage for wildlife. No wonder Mule deer are declining! While there are other factors in Mule deer decline, in the Sunflower allotments, the lack of forage left for deer may be a key cause." (BMBP comments, p. 9, 3<sup>rd</sup> to last par.)

Comments re: violation of grazing standards, particularly stubble height:

"Creeks are also drying up outside of exclosures, where the only lush, healthy forage and hardwoods remain. This level of intense forage and water consumption by cattle alone is in violation of numerous Forest Plan standards and goals, such as for higher residual stubble heights, less browsing on riparian hardwoods, the forage to be reserved for wildlife, and Riparian Management Objectives in general under PACFISH/INFISH to preserve fish habitat, riparian biodiversity, and ecological processes." (BMBP comments, p. 9, 2<sup>nd</sup> to last par.)

"There is severe over-grazing by cattle all around Cougar Creek with very short stubble heights and areas of bare ground. (See our photos around Cougar Creek.) Cattle allotment planning needs to either fully exclude livestock from riparian areas except for small water gaps and exclude cattle from all damaged areas or else not reauthorize cattle grazing. It's extremely sobering to witness the extreme cattle damage in these allotments." (BMBP comments, p. 6, most of last par.)

"The Forest Service is not obligated to reauthorize livestock grazing when the damage threatens or destroys other values under the Forest Plan or fails to meet Forest Plan standards, as is the case with these allotments. Remaining stubble as short as 1 to 2" tall with areas of bare ground does not meet Forest Plan standards or best available science constraints." (BMBP comments, p. 7, 3<sup>rd</sup> par.)

"Conditions are currently so bad on the Wind Creek allotment (as of early September 2020) that most of these pastures, if not all, need to have no cattle grazing at least until after bunch grass seed set every

year for years to come to recover from long-term over-grazing effects to the bunch grasses, as well as to most other plants." (BMBP comment, p. 7, last par.)

"Based on our field surveying, cattle were not being removed from pastures before the forage stubble height limit was reached. Current typical stubble height requirements for removal of livestock are triggered by reaching 4 to 6" of stubble height. Such stubble height limits were violated —apparently as the norm, considering the long-term cumulative legacy effects—across pastures and allotments. So monitoring of conditions and removal of cattle prior to stubble height thresholds being reached are not "routine administration" on this part of the Ochoco. So now a whole new culture of livestock management would have to be instilled and enforced, preferably with different new staff who were not involved with allowing the previous cattle degradation to occur year after year." (BMBP p. 13, par. 3)

" Almost all pastures are already in unsatisfactory condition. The starting points for proposed monitoring and standard enforcement should start immediately with these dismal conditions. These measures should have been taken decades ago. Almost every part of pastures we surveyed were at only one to two inches of stubble with extensive or intermittent bare ground. Severely degraded creek banks and stream channels and hardly any or no riparian hardwoods was the norm outside of exclosures. Notably our field surveying locations were relatively random, based on easily accessible mapped locations of livestock ponds and road crossings of creeks and on a few opportunistic stops, not based on selecting for the most damaged locations." (BMBP comments, p. 14, par. 4)

### Resolution:

\*Due to the current lack of suitability of the Sunflower allotments area for cattle grazing, our preferred resolution would be no reauthorization of livestock grazing, as under the No Action alternative, with two years before cattle removal, but with active riparian restoration implemented to restore riparian conditions from what appears to be decades of legacy damage from over-grazing from livestock. Current cattle use at current numbers and current long seasons of use apparently is preventing any significant riparian recovery, as well as not meeting stubble height requirements (as of early September 2020, based on our field surveying) over the majority of the Sunflower and Wind Creek allotments. Only complete removal of cattle and related passive recovery over years may restore riparian areas to meet riparian management objectives and restore conspicuous large areas of bare ground, as well as simplified plant communities with little botanical diversity.

If grazing is reauthorized, the following partial remedies should apply:

\*"Why hasn't all this monitoring to meet grazing criteria and Forest Plan requirements not been done? Range monitoring should be done more than twice a season to avoid damage. Monitoring at the end of the grazing season could indicate changes that need to be made for the next season but does not prevent the tremendous amount of damage that could occur between mid-season and the end of the season. There should be at least three monitoring visits during the grazing season for each pasture in each allotment, such as in late Spring, mid-summer, and at the end of the season. If active herding is required, ideally the permittees would be required to move the cattle at least every three or four days. More monitoring is needed to make sure that active herding is happening, there are no exclosure fence gaps, that cattle numbers and distribution are as they were directed, and that thresholds for stubble heights, riparian hardwoods, and bank stability (etc.) are not being violated." (BMBP comments, p. 13, 2nd to last full par.) \* "Were the cattle in these allotments taken off the pastures early due to lack of forage in 2020? It

looked that way in early September. So much for our faith in the Forest Service using "range readiness"

criteria to guarantee avoidance of legacy soil, plant cover, and riparian impacts. The Forest Service should be monitoring livestock grazing frequently enough to stop impacts before they become severe or legacy impacts regardless of the status or stage of the permit authorization process." (BMBP comments, p. 12, last par.)

- \*"Conditions are currently so bad on the Wind Creek allotment (as of early September 2020) that most of these pastures, if not all, need to have no cattle grazing at least until after bunch grass seed set every year for years to come to recover from long-term over-grazing effects to the bunch grasses, as well as to most other plants." (BMBP comment, p. 7, 2<sup>nd</sup> to last par.)
- \* "The stubble height standard should be at least four inches for all pastures and at least six inches for all riparian zones. This is standard on other Forests where there is active herding or up-to-date better grazing management being practiced." (BMBP comment, p. 14, par. 3)
- \*"Stubble height triggers for livestock movement in green line plants should be six inches across the board, not just for existing unsatisfactory conditions. Unsatisfactory conditions are already ubiquitous across these allotments. This, too, is standard for Forests and Districts with better grazing management, using best available science. Given the drastically altered riparian conditions and greatly diminished upland plant diversity, we are asking the Forest Service to automatically require reductions in livestock numbers, a full-time rider for each allotment, rest of pastures, and increased stubble height, as well as a shorter grazing season (e.g. July 15<sup>th</sup> to mid or late September) based on existing degraded conditions, rather than allowing another season of damage first. Of course we support No Action or our modified No Action/active riparian restoration alternative for quicker riparian recovery and the opportunity for years of passive recovery to fully restore proper functioning over long-term continued livestock use." (BMBP comments, p. 14, par. 5)
- \* "The Forest Service needs to use the precautionary principle to achieve maximum, not minimum riparian and upland biodiversity restoration. It is not just a matter of protecting existing riparian and upland diversity and ecological processes, but of restoring them where they no longer exist, which applies to the majority of these allotments outside of the small exclosures." (BMBP comments, p. 14, par. 6)

# Potential Violation of Region 6 FEIS on Invasive Plant Management

The Region 6 Invasive Plant Management FEIS emphasizes prevention of the introduction and dispersal of invasive plants. Prevention measures need to include limiting ground disturbance and controlling livestock as vectors of invasive plants to be effective. We are especially concerned regarding the high potential for invasive plant introduction and dispersal in the Sunflower allotment complex because of the already very extensive detrimental soil impacts, bare ground, and minimal forage cover, as expressed above under detrimental soil impacts and failure to meet stubble height grazing standards objections. As discussed below, much more ground disturbance is planned, with no reduction in cattle numbers or length of the grazing season to reduce the potential for over-grazing and perpetuation of extensive ground disturbance. There is also no apparent strategic plan to identify the sources of invasive plant species into the area and to control the vectors, which include the cattle for dispersal, if not for introduction, of the invasive plants.

# Our comments document our concerns:

'The Proposed Action would increase the introduction and dispersal of exotic invasive plants. Exotic invasive plants that would be increased by extensive ground disturbance through continued cattle grazing, extensive tree thinning, water development construction and reconstruction, and more fencing, plus the use of heavy equipment such as bulldozers for riparian restoration, include the already existing: Bull thistle; Butter and eggs; Canada thistle; Common mullein; Common St. Johnswort; Dalmatian toadflax; Diffuse knapweed; Houndstongue; Hardheads; Jointed goatgrass; Leafy spurge; Medusahead; North Africa grass; Oxeye daisy; Scotch cottonthistle; Spotted knapweed; Sulphur cinquefoil; and Whitetop, for a combined total acreage over the three allotments of 744.90 acres of invasive plants—before they are dispersed further by ground disturbance. Cattle are known contributors to invasive exotic plant species introduction and dispersal in allotments. This is a strikingly high acreage and number of exotic invasive plant species already established in the allotments." (BMBP comments, p. 3, #5, 1st par.)

"Continued cattle use of the allotments would continue to disperse the existing exotic invasive plants and likely introduce more invasive plants. The Region 6 FEIS on invasive plant management requires prevention of the sources of invasive plants, not just perpetual herbicide spraying or other 'treatment'. Cattle are a known source of exotic invasive plants. Until the cattle are excluded from all existing infestations of invasive plants, it is foreseeable that their dispersal would continue, establishing new populations. Then it would be virtually impossible to control the invasive plants, as demonstrated by the high acreage and number of exotic plant species already in the allotment. The National Environmental Policy Act incorporates the goal of using analysis to solve existing resource (life source) problems. The Forest Service should have analyzed the issue of cattle perpetuation of invasive plant establishment and spread in more depth and included rather evident solutions to this problem, such as completely excluding cattle from invasive plant infested areas as part of the Proposed Action or proposing the No Action alternative." (BMBP comments, p. 3, #5, 2<sup>nd</sup> par.)

"Re: the Table 2 effects determination of "moderate" for No Action and "low" for the Proposed Action for risk of "range improvements" to contribute to establishment and/or spread of invasive plants, this hardly makes sense, as wildlife habitat "improvements" are not proposed for the No Action alternative yet are judged to contribute to establishment and/or spread of invasive plants more than for alt. 2, which does plan such "range improvements." (BMBP comment, p. 12, 2nd to last par.) In other words, increased ground disturbance is planned for the proposed action, which provides a larger seedbed for invasive plants, while the No Action alternative would decrease ground disturbance after cattle are removed from the area and allows for much greater passive recovery of plant cover growth. Thus the proposed action should be predicted to have more potential for invasive plant introduction, dispersal, and establishment than the No Action alternative. This is especially the case since cattle are known vectors for introduction and dispersal of invasive plants.

#### Resolution:

\* "All existing invasive plant populations should be buffered from ground disturbance and cattle should be excluded from entering them. All Region 6 FEIS prevention measures regarding invasive plant

introduction and dispersal should be followed. Permittees should be required to use only weed free feed or pastures for at least two weeks prior to coming onto National Forest lands." (BMBP comments, p. 16, 2<sup>nd</sup> to last par.)

\* We also recommend evaluating likely entry points for exotic invasive plants on the ground as part of field surveys and figuring out means of control for point sources and more indirect vectors. Often invasive plants start at roads or at points of entry (holding corrals) for livestock. Cattle also trail along riparian zones, dispersing invasive plants that catch on their hair, such as Houndstongue. Cattle manure can also provide a rich source of nutrients for invasive plant growth, as I've seen with Star thistle along the John Day River.

# Failure to Uphold Other Forest Plan Goals and Objectives

While the Forest Service dutifully reiterates the guidance of multiple planning documents and legally binding Acts that require management decisions to be "consistent with other multiple uses and objectives" and to ensure that "continued domestic livestock grazing is consistent with the goals and objectives of the Forest Plan", the agency fails to use in-depth analysis to determine whether continued livestock grazing is really consistent with the multiple uses protected by the Forest Plan. Forest Plan goals and objectives include preserving hydrologic flows, retaining riparian ecosystem functioning and biodiversity, protecting soil integrity, and protecting the habitat needs of wildlife and aquatic species that evolved with pre-European colonization historic levels of water abundance and plant biodiversity. Yet extreme over-grazing situations in allotments such as the Sunflower allotment complex, based on the cumulative impacts of both legacy over-use by livestock for decades and continued livestock damages preventing full recovery, challenge the Forest Service automatic assumption of consistency with other Forest Plan goals and objectives. Other past and ongoing management impacts from timber sales and roads in the Sunflower allotment complex also contribute to the existing degradation, but full ecological restoration entails removal of the causes of degradation, including cattle grazing, which is admitted in the EA to be an unnatural impact that is well beyond the historic range of variability.

Despite such existing legacy damage, the Forest Service is merely proposing cosmetic reforms that are relatively ineffectual by not supporting cessation of cattle grazing or at the least, significant reductions in the number of cattle allowed and shortening of the grazing season to allow for significant ecological recovery.

The Forest Service not only has the ability, but the obligation under the law, to ensure that proposed management is consistent with other multiple use goals and objectives of the Forest Plan:

"The purpose of NEPA review and evaluation of livestock grazing reauthorization in the Sunflower Cluster is to...ensure livestock grazing would be managed in a manner that maintains or moves National Forest grazing allotments towards the objectives, desired conditions, and standards and guidelines identified in the Ochoco National Forest Land and Resource Management Plan (Forest Plan).

Review and evaluation of livestock grazing reauthorization on the Sunflower Cluster allotments is needed because:

- Where consistent with other multiple use goals and objectives, Congressional intent is to allow grazing on <u>suitable</u> lands (Multiple Use Sustained Yield Act of 1960, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land and Management Act of 1976)....
- It is Forest Service policy to make forage available to qualified livestock operators from lands suitable for grazing consistent with the Forest Plan (FSM 2203.1, 36 CFR 222.2(c)).
- It is Forest Service policy to contribute to the economic and social well-being of people by providing opportunities for economic diversity and promoting stability in communities that depend on range resources for their livelihood (FSM 2202.1)." (EA (final version), p. 3, underlining emphasis ours)

As mentioned before, planning to continue unsustainable levels of livestock use in the face of extreme climate change raising ambient temperatures and causing droughts, leading to predictable water scarcity in already very marginal and degraded lands where creeks that may have been perennial in the past appear to be drying up, is not providing any opportunity for economic diversity, nor promoting long-term or even current stability in communities that depend on range resources for their livelihood.

Our comments supporting this objection:

"The Forest Service is not obligated to reauthorize livestock grazing when the damage threatens or destroys other values under the Forest Plan or fails to meet Forest Plan standards, as is the case with these allotments. Remaining stubble as short as 1 to 2" tall with areas of bare ground does not meet Forest Plan standards or best available science constraints. All the severely damaged riparian areas outside exclosures are not moving toward Riparian Management objectives under INFISH." (BMBP comments, p. 7, 3rd par.)

"This is a tremendous amount of taxpayer-subsidized bolstering planned for a failed and highly ecologically destructive cattle grazing situation: 50 water developments and 26.2 miles of fence reconstruction, 8 new water developments, 4 miles of new fencing, non-commercial young and mature tree thinning of 1,966 acres, pile burning, stream restoration on three creeks—all to prop up a cattle grazing regime that is clearly not working with these methods. This is insane." (BMBP comments, p. 6, 3<sup>rd</sup> par.)

"These plans demonstrate how unsustainable this allotment is for cattle grazing, when wells are dug and maintained to support the cattle's heavy water demand on an area with little water, where the creeks and springs have already been sacrificed to cattle at the expense of plant biodiversity and water retention for wildlife and fish. The unsustainability of the situation is also clear from the perpetual plans for reconstruction of water developments, construction of new spring developments and wells, and active riparian restoration to start repairing long-term livestock damage on a woefully limited basis compared to the extensiveness of the damage." (BMBP comments, p. 6, par. 4)

"The costs of new water developments, water development reconstruction, miles of new fencing, and active riparian restoration far outweigh any benefit to the ranchers. The public and the ecosystem bear the expense. These ecological expenses include continuing destruction of fish populations; and loss of: water retention; water and forage for wildlife; natural hydrologic and riparian functioning; plant diversity; and recreational and scenic values. Beyond all this, the cattle also contribute to the severity of climate change effects through both methane gas emissions and depletion of water, loss of water retention, and soil and plant impacts that decrease the viability of wildlife species. Elk also spend energy

and lose otherwise suitable habitat by actively avoiding cattle." (BMBP comments, p. 7, 4th par.)

"Elk and deer would be far better distributed on these allotment areas if they had enough to eat. It's no wonder that we were not seeing elk or deer or even much sign of elk (none) or deer use (few tracks) because there is not enough forage left for them due to the excessive cattle consumption of already marginal available forage. Cattle are at least as big a factor in poor deer and elk distribution and excessive fine sediment loading in streams as roads, if not more." (BMBP comments, p. 5, par.2)

"It seems that the Forest Service really doesn't care about Sensitive plants or enough about riparian ecological functioning and biodiversity to avoid foreseen negative impacts to both from continued livestock impacts. The agency bias toward livestock destruction violates Forest Plan requirements to protect other Forest Plan values. Likewise, the Forest Service doesn't seem to care about negative effects to recreation and wildlife from continued cattle impacts. (See Table 2 Proposed Action negative effects determinations to Sensitive plants and their habitat versus No Action Beneficial effects and No impact effect determinations for grazing impacts and effects from proposed "range improvements" on EA p. 23 and risk to dispersed recreation sites and Wilderness values determinations on EA p. 24.)" (BMBP comments, p. 12, 4th par.)

"The Forest Service does not have a good track record for ecologically sound spring development. There has been little good placement, few adequately sized exclosures, and little avoidance of severe degradation of associated biodiversity for many decades, across multiple Forests. Livestock use has been allowed to outweigh all other Forest Plan values for far too long. Spring development inevitably leads to increased livestock use and degradation in the spring area, so we oppose new spring developments and support full exclosure of spring areas (and other riparian zones) from cattle [and] sheep for as long as livestock are allowed on the "pastures". Too much riparian biodiversity has already been sacrificed to cattle. Springs should receive at least as much protection as lithosol habitat, which is not proposed for new water developments or other livestock-attracting modifications." (BMBP comments, p. 15, par. 4)

### Resolution:

\*Our preferred remedy would be to not reauthorize livestock grazing on the Sunflower Cluster allotments, as continued livestock use seems doomed to failure, especially with legacy degradation and escalating extreme climate change. Complete removal of the cattle after two years would best ensure meeting all the other Forest Plan goals and objectives that are currently not being met. However, including planned active riparian restoration in the modified No Action alternative would help meet riparian management objectives faster and better support recovery of fish populations and other aquatic species, as well as sensitive plants, and better restore hydrologic flows and floodplains for greater water retention, which is badly needed. We ask for a combination of No Action with planned active riparian restoration.

\*If cattle grazing is reauthorized, there needs to be significant reduction in cattle numbers allowed on these allotments and a shorter grazing season overall that excludes the early Spring reproductive season (April and May) to allow for plant re-seeding across the area and better re-growth of riparian hardwoods. The fall grazing season should not extend beyond mid-to late September or when stubble height limits are reached, whichever comes first. There should still be active herding and adaptive management planned, as well as rotational deferring of pastures for rest. Cattle should be fully excluded from

perennial riparian creeks, springs (the full riparian zones), and badly damaged intermittent stream sections either by fencing (temporary or permanent) or by complete exclusion from that portion of the pasture. Livestock ponds blocking natural stream channels need to be removed to allow for natural stream systems and riparian functioning.

# III. The Sunflower Grazing Reauthorization Project Would Violate the Endangered Species Act

We are very concerned that the Forest Service may not be adhering to the intent and management guidance of the Endangered Species Act. We are concerned regarding Forest Service disregard for the need to maintain sufficient suitable habitat and conditions to prevent a trend toward federal up-listing for Threatened-listed Mid-Columbia Steelhead trout; Threatened-listed Gray wolf; Sensitive-listed Columbia Spotted frog and Redband trout; Sensitive-listed plant species; and Northern goshawk, which is cumulatively threatened by the ever escalating scale and pace of heavy logging based on density reduction. All of these species have known active or potential suitable habitat in the Sunflower Grazing Reauthorization project area that is potentially threatened by the Sunflower Grazing Reauthorization management plans.

Our comments explain our concerns regarding potential violation of the Endangered Species Act through degradation or elimination of suitable and core habitat setting back species recovery, threatening loss of population viability, or otherwise contributing to a federal uplisting trend for the species. Comments re: Threatened-listed Mid-Columbia River steelhead trout, Sensitive Redband trout, Sensitive Columbia spotted frog and other Sensitive designated wildlife species, including Sensitive Greater sage grouse, Sensitive butterfly and bee species, and Birds of Conservation Concern:

"The 'Sunflower Grazing Reauthorization and Wildlife Habitat Improvement Project' Environmental Assessment's Proposed Action (alternative 2) would reauthorize cattle grazing on Ochoco National Forest public/treaty lands on the Paulina Ranger District despite widespread severe over-grazing and long-term riparian damage to creeks and springs from current and past livestock grazing. Continued cattle use would set back badly needed recovery of riparian areas, natural plant cover and diversity, and soil integrity and fertility. Continued cattle grazing of the allotments area, even with proposed adaptive management and limited riparian restoration, threatens the continued viability of the Sensitive Redband trout populations and Sensitive Columbia Spotted frogs, downstream Threatened Mid-Columbia Steelhead trout, and many Sensitive or declining bird species, including the Greater Sage Grouse, as well as harming meadow habitat for Sensitive native Bumblebee species and a Sensitive butterfly species." (BMBP comments, p. 1, par. 1)

"Based on the EA analysis, wildlife species that would be threatened by the proposed cattle grazing reauthorization (and some by the proposed extensive tree thinning up to 16-20.9" dbh) but would benefit from the No Action or modified No Action/Active riparian restoration alternative include: the Sensitive Greater Sage grouse; the Sensitive Silver-bordered Fritillary butterfly; the Sensitive Western bumble bee and the Morrison bumble bee; the Sensitive Fir Pinwheel snail; Management Indicator species Rocky Mountain elk and Mule deer; Focal species Pronghorn, wild horses, and Northern goshawk; Sensitive Lewis' woodpecker; raptors; and a number of Birds of Conservation Concern, including: Flammulated owl; Calliope hummingbird; Olive-sided flycatcher; Willow flycatcher; Loggerhead shrike; Sage thrasher; Brewer's sparrow; and Sage sparrow; as well as Focal

bird species: Chipping sparrow; Nashville warbler; Red-naped sapsucker; Red-eyed vireo; Yellow warbler; MacGillivray's warbler; Western wood peewee; Warbling vireo; Vesper sparrow; Lincoln's sparrow; and Savannah sparrow. This is an extraordinarily high number of Sensitive-designated species, Focal species, and species in decline (which also would include Threatened Steelhead trout, Sensitive Redband trout, Sensitive Columbia Spotted frog, and many Sensitive plant species) that would potentially be harmed by the proposed action. This is especially egregious in that the No Action alternative should have been identified as the Environmentally preferred action or a modified No Action/riparian restoration alternative should have been proposed, identified as the Environmentally preferred action, analyzed in depth, and offered as the Proposed Action. Planning for potential continued decline of so many Sensitive wildlife species demonstrates Forest Service disregard for the Endangered Species Act goal of preventing upward trends in species listed—for example, from Sensitive to Threatened and from Threatened to Endangered listing. The agency's willingness to sacrifice so many wildlife species also shows disdain for the National Forest Management Act's goal of ensuring the viability of all native vertebrate species." (BMBP comments, p. 2, #3)

"There is no guarantee that Silver-bordered fritillary, Western bumblebee, or Morrison's bumblebee would remain viable under the Proposed Action management plan. 'May impact individuals or habitat' could be a death sentence for these Sensitive species in the area, as they rely on a diversity of flowers throughout spring and summer. Plant and flower diversity is greatly diminished in the allotment area due to over-grazing. Continued over-grazing seems inevitable under alternative 2 and could eliminate these species' food source. Fir pinwheel viability is also at risk under alternative 2 due to continued cattle degradation of most riparian areas." (BMBP comments, pp. 11-12, last and 1st par.s)

"The effects determination statements in Table 2 for Birds of Conservation Concern and Focal species reflects a lack of species-specific effects analysis and an unsupported assumption that "managing habitat within HRV" somehow ensures that adequate habitat would be provided for all of these diverse species with different habitat needs overall. This ignores the very unnatural impacts of continued over-grazing and trampling by a big exotic invasive species: European cattle. These impacts include loss of sufficient grass height and shrubs for ground and shrub bird nesting and foraging, and exposure of ground nests to heavy and concentrated cattle trampling. Riparian areas are key biodiversity hot spots in the region, yet most of them in the allotments area would be negatively affected by cattle, as is the case now. 'HRV' (Historical Range of Variability) is also often estimated by the Forest Service based on inappropriate comparisons with already over-logged and over-grazed lands during years post-dating the required baseline of prior to European colonization. The use of inappropriate baseline data could then compare current conditions with already over-logged and over-grazed conditions rather than contrasted with natural conditions pre-dating European colonization." (BMBP comments, p. 12, par. 2)

Grav wolf:

Background re: Threatened-listed Gray wolf in the Ochoco National Forest from our Black Mountain timber sale comments that illuminate missing cumulative effects analysis in the Sunflower Grazing Reauthorization EA:

The Ochoco National Forest is "not considered" occupied by wolves based on no population study or wolf surveys or camera sets or fur sets on the ground. So it is really not known if the Ochoco National Forest is currently occupied by wolves, since not all wolves in Oregon are radio-collared. Even

dispersing wolves need to be able to forage and have security from humans who would shoot or trap them, so as to perpetuate the species' recovery through dispersal for genetic diversity in the packs.

As elk and deer are the primary prey for Gray wolves and effects to elk and mule deer from the Sunflower Grazing Reauthorization project (as well as the pending Black Mountain timber sale and other timber sales) would result in a negative trend in habitat, we are concerned that too much logging of thermal and hiding cover for deer and elk from proposed thinning would also negatively affect the viability of recovering resident or transitory dispersing wolves in the Sunflower project area.

There are obvious problems with the DEIS rationales for no adverse impacts to Gray wolves as: Gray wolves are known to disperse through the Ochoco, so this is a known area of wolf activity; security habitat would likely be reduced for wolves overall due to loss of cover for elk and deer and increased human disturbance from new "temporary" roads and re-opened closed roads in other "projects" such as the Black Mountain timber sale; and there are significant foreseeable negative effects to Gray wolves from displacing them (along with their elk and deer prey) to adjacent private lands—i.e. higher risk of wolves predating on livestock and thus higher risk of wolves being killed. The wolves are likely to be adversely affected.

Comments re: Gray wolf in response to the Sunflower Grazing Reauthorization project EA:

"Potential negative effects of the Proposed Action alternative to Region 6 Sensitive species are ignored in Table 2 effects determinations. These include the continued loss of forage to cattle affecting elk and Mule deer, whom we did not see at all during early September field surveying, when there was virtually no forage left from the cattle over-grazing and hardly any hardwoods outside small exclosures. This lack of forage would also negatively affect Pronghorn and indirectly affect Gray wolf by limiting its major prey species. Yet Gray wolf has a determination of 'not likely to adversely affect', and the determinations for elk, Mule deer, and Pronghorn hangs on consistency with an extremely outdated Forest Plan. Forest Plan consistency has not prevented declines in many species on the Ochoco or on other Forests with similarly outdated Forest Plans across eastern Oregon and southeastern Washington. There is no evidence that continued viability of these species can be 'expected' based on Forest Plan consistency alone. In fact, there is a regional decline in Mule deer under these Forest Plans and Pronghorn remain well below historic numbers." (BMBP comments, p. 11, 2<sup>nd</sup> to last par.)

Comments re: Sensitive-listed plant species:

"Based on the Environmental Assessment analysis, Sensitive plants that could be harmed by continued livestock grazing but would benefit from either the No Action alternative or our suggested modified No Action/Active riparian restoration alternative include the following, which are either documented or suspected to be in the area and are mostly associated with riparian areas such as creeks, springs, or wet meadows: Henderson's needlegrass; Wallowa needlegrass; South Fork John Day milk vetch; Bastard kentrophyta; Upward-lobed moonwort; Crenulate moonwort; Botrychium lunaria; Mountain moonwort; Twin-spiked moonwort; Peck's mariposa lily; Lesser panicled sedge; Idaho sedge; Slender sedge; Retorse sedge; Bolander's spikerush; Least rush; Ochoco lomatium; Northern adderstongue; Rafinesque's pondweed; Wolf's willow; Arrowleaf thelypody; Lesser bladderwort; Richardson's calliergon moss; Star campylium moss; Great mountain flapwort; Schistidium moss; Pinkstink dung moss; Mucronleaf tortula moss; and Little brownwort. Plant trampling by European cattle is typically indiscriminate and concentrated in vulnerable riparian areas. The Sunflower allotments are not exceptions to this. Riparian areas in eastern Oregon are concentration centers of high plant and wildlife biodiversity. Declines in less common riparian plants are directly associated with domestic cattle and sheep grazing, as well as with other legacy

mis-management such as road building in riparian areas and intensive heavy logging in riparian areas. The EA analysis acknowledges that the contribution to forage (and plant biodiversity) loss is far higher from the large number of cattle than from wild ungulates and the relatively low number of wild horses combined. Planning to allow continued loss of so many Sensitive plants that are known or suspected to be in the allotments area reflects a disregard for plant biodiversity and the goals of the Endangered Species Act, and a strong agency bias to perpetuate livestock grazing at any cost." (BMBP comments, pp. 2-3, #4)

### Resolution:

Blue Mountains Biodiversity Project has commented on our objection regarding violations of the Endangered Species Act. See our comment quotations and citations in the paragraphs above. Some of the species addressed in this objection have remedies cited under NFMA—MIS and other species viability above, that are also applicable to the ESA violations.

Additional partial resolutions are by species below:

Re: Mid-Columbia Steelhead trout:

\*"All pastures that could cause impacts to Mid-Columbia Steelhead trout, apparently including 'that pasture on Wind Creek' under permit #05687, North Fork Wind Creek, and Congleton Creek, must either be closed to livestock use entirely or fenced off to completely exclude cattle from the riparian zones in these pastures in order to fully protect Threatened-listed Mid-Columbia Steelhead trout, including their spawning redds, that could be destroyed by excess fine sediment from upstream cattle use or from increased water temperatures due to lack of creek shading from cattle over-grazing, or from direct trampling." (BMBP comment, p.7, 3<sup>rd</sup> to last par.)

\* "Protection of Steelhead redds in any creek, including North Fork Wind Creek and Congleton Creek should require protection of the redds and the surrounding area by electric fence or complete cattle removal from access for the associated pasture for the entire length of the creek. Steelhead fry and adults can also be harmed by trampling or delivery of excess fine sediment or loss of plant shading in other parts of the creek. It should not be assumed that topography or woody debris will adequately protect the redds, fry, or adult Steelhead or their habitat from cattle impacts." (BMBP comment, pp. 13-14, last par. to 1st par.)

\* Any creek with <u>potential</u> for Steelhead trout spawning should not be grazed until at least July 15<sup>th</sup> to protect spawning habitat. This is standard on some of the other regional Forests and based on best available science.

Re: Sensitive Redband trout and Columbia Spotted frog and Sensitive riparian plant species:
\*Drop all heavy equipment use and related commercial-size logging (aka "non-commercial thinning up to 21" dbh) in potential Columbia Spotted frog habitat and Redband trout habitat stream reaches and within RHCAs in general except for aspen stand restoration or large wood placement-related conifer thinning up to 21" dbh or less, as long as trees contributing to bank stability and primary stream shading are retained. Buffer and protect any Columbia spotted frogs or Sensitive plants found in current or pre-implementation surveys.

\* "The required monitoring outlined on EA pages 26-27 should also be required for pastures without Threatened fish species to prevent loss of Redband trout, Columbia Spotted frog, and riparian functioning in general." (BMBP comment, p. 14, par. 2)

Re: Gray wolf:

\*Retain more good security cover (hiding and thermal) for elk and deer where there is high use by elk and deer, and through dropping thinning suitable in habitat for other density-related species, such as

Northern goshawk...

\*Gray wolf would most benefit from no livestock grazing in the area, as Gray wolves are most often killed due to conflicts with livestock. Our preferred resolution is to not reauthorize livestock grazing in the Sunflower allotments complex project area. Otherwise, we ask that the rancher permittees are required to use non-lethal means to protect their cattle—especially during calving—if they aren't already doing so. Non-lethal methods for livestock include active herding, use of lights or fladry around vulnerable animals, and immediate proper disposal of any livestock carcasses.

Re: Northern goshawk:

\* No commercial-size logging in suitable primary goshawk habitat and PFAs and no non-commercial size thinning (up to 9" dbh) in PFAs and within the nest core 30 acre buffer.

Re: Birds of Conservation Concern and Sensitive-designated butterfly and bumblebee species:
\*Most birds of conservation concern and Sensitive butterfly and bumblebee species would best benefit from no livestock grazing (as an EA acknowledged unnatural impact for the ecosystem that is already far beyond the natural range of variability.) If cattle use is reauthorized, cattle should be excluded from riparian zones and wet meadows, as most biodiversity in flowers used by Sensitive butterflies and bumblebees is located in riparian areas. Beyond that protection, cattle should be removed promptly when stubble height limits are reached. These butterfly and bee species and ground-nesting or riparian-associated birds would also be benefitted by shortening the cattle grazing season to exclude the early Spring reproductive season (April through May) and late season cattle use (e.g. in late September and/or October) that tends to remove riparian hardwoods and trample plants into dust, with impacts that carry over into the next grazing season.

We request such shorter grazing seasons for these allotments, which seem to already be happening due to lack of forage re: later fall grazing. Lower numbers of cattle also mean reduced impacts to groundnesting birds, birds dependent on ground cover for foraging, shrub-nesting birds (particularly in riparian areas), and butterflies and bees dependent on moist meadow flowers or other flowers lost to cattle grazing (particularly in riparian areas.) We are also asking for reduced numbers of cattle more

appropriate to the very marginal grazing conditions if grazing is re-authorized.

Re: Sensitive plants:

\*"We support beneficial effects to two Sensitive plant populations and 4,011 acres of riparian potential Sensitive plant habitat and to one Sensitive plant population and 8,771 acres of riparian potential Sensitive plant habitat from active riparian restoration if the existing plant populations are located in exclosures or are avoided with heavy machinery, but not at the expense of continued cattle grazing damage after the two year phase-out period (required for No Action). Longer-term continued cattle use of the allotments area equates to continuing unnatural impacts from cattle to Sensitive plant populations and their suitable habitat." (BMBP comment, p. 12, par. 3)

\* If cattle grazing is re-authorized, many Sensitive plants may not recover unless there are reduced numbers of cattle and shorter grazing seasons, with cattle excluded from riparian zones and wet meadows. Most Sensitive plants have habitat within riparian zones. Any Sensitive plant populations that are mapped or found during surveys should be made off limits to cattle by temporary fencing or closure

of that area to grazing.

\*"Ground-disturbing equipment should not be used within the 100 foot buffer around Sensitive plant

populations, with no exceptions unless the equipment is on existing open roads." (BMBP comment, p. 15, 2<sup>nd</sup> par.)

# IV. The Sunflower Grazing Reauthorization Project Would Violate the Clean Water Act

Examples of our comments regarding water quality and potential violations of the Clean Water Act:

"Water quality and hydrologic flow recovery would also be significantly impeded by continued cattle grazing even with planned adaptive management and limited active riparian restoration." (BMBP comment, p. 1, par. 1)

"We are opposed to the Forest Service allowing historic livestock ponds to continue to block stream channels. There is no good reason to continue to block stream channels and alter natural flows this way, contrary to the best available science. These livestock ponds look like denuded sewage ponds; they are not something that should be preserved because they are "historic" degradations. A few could be retained which have heavy wildlife use as a stop gap measure pending broader riparian restoration of perennial streams, but these should be prioritized where they are not blocking what used to be a perennial or larger intermittent stream channel. See our survey sheets and photos regarding existing livestock ponds, wildlife sign, wildlife sightings, and our recommendations." (BMBP comments, p. 14, last par. & p. 15, 1st par.)

## Resolution:

- \*"Most livestock ponds should be decommissioned to allow reconnection of historic stream channel flows. Any livestock ponds retained for wildlife use should have wild life friendly exclosure fencing, native riparian hardwood planting, and water being piped to an outside trough at least 200 to 300 feet outside the riparian area, with no exceptions, for as long as cattle are still on the allotments. Wildlife ramps inside the troughs should be used to prevent rodent and bird deaths. We are strongly opposed to the development of any more springs, livestock ponds, and wells for livestock." (BMBP comments, p. 15, par. 1)
- \*Drop all new development of springs, livestock ponds, and wells for livestock. Reconstructing and maintaining existing water developments for livestock should only be done if livestock grazing is reauthorized or for the worst problems that should be corrected for the two years of further livestock use before cattle removal under the No Action alternative. Spring restoration by excluding cattle from springhead riparian zones and moving water sources outside the spring riparian zone should be implemented if grazing is reauthorized or during the two years before cattle removal under the No Action alternative or a modified alternative.
- \*Drop planned commercial size thinning and heavy equipment use in the RHCAs, except for large wood placement or aspen stand restoration-related conifer thinning up to 18" dbh, which retains all conifers contributing to stream bank stability or primary shading of a stream.
- \*Drop any planned thinning equipment stream crossings, with our preference being only non-commercial thinning by hand up to 9" dbh.

Inadequate Analysis and Mitigation Regarding Effects to Climate Change

Once again, the Forest Service fails to accept responsibility for their increasing contributions to climate change through the increasing scale and pace of incremental deforestation and carbon storage reduction through repeated timber sales at an accelerated pace and scale, including the nearby planned Black Mountain timber sale, as well as through continued livestock over-grazing. Removing junipers up to 21" dbh as planned for the Sunflower Grazing Reauthorization project is not necessary nor desirable regarding loss of carbon storage. See our related comments below:

"Encouraging the continued grazing of livestock on very marginal and degraded grasslands, when creeks are drying up is <u>not</u> 'promoting stability in communities that depend on range resources.' (EA p. 5) This is especially true with the foreseeable advent of more high temperatures and droughts and more intense wild fires under escalating climate change. Yet the Forest Service fails to analyze climate change effects and their interactions with the existing situation of severe extensive over-grazing, long-term riparian damage, and evidence of what were probably historically perennial creeks drying up. If the cumulative effects of climate change and continued livestock grazing in this area were analyzed in depth, there would be a clear indication that continued livestock grazing authorization is not advisable. Local ranchers are bound to face more and more cut-backs in the grazing season and numbers of cattle that can be supported and other limiting grazing requirements under adaptive management due to increased loss of forage to drought and fires and lack of sufficient water due to drought, high temperatures, and the continued high demand on water by the cattle. This situation can lead to increasing economic loss to the ranchers and eventual abandonment of the allotments, at which point the existing riparian area destruction, loss of plant diversity and abundance, soil impacts, and stress on wildlife populations will be even more intense and much harder to recover and restore." (BMBP comments, pp. 4-5)

"Beyond all this, the cattle also contribute to the severity of climate change effects through both methane gas emissions and depletion of water, loss of water retention, and soil and plant impacts that decrease the viability of wildlife species." (BMBP comment, p. 7, 4th par.)

#### Resolution:

BMBP has commented regarding Forest Service failure to acknowledge and mitigate their contributions to catastrophic climate change. See our comments quoted and cited above regarding the contribution of the Sunflower project proposed action to climate change.

To resolve this problem, the Forest Service needs to make the following modifications to the Sunflower Grazing Reauthorization project, as suggested in other proposed resolution remedies below:

- \* Acknowledge and analyze in depth direct, indirect, and cumulative effects of proposed projects to climate change, including calculating Greenhouse gas emission contributions of planned actions in future planning documents. Global warming (aka climate change) is by definition from cumulative effects that all contribute to the problem. Global warming is now the biggest crisis of our time, threatening the loss of a viable planet for the majority of existing species, including humans, and the loss of fundamental ecological processes that support life. No one is off the hook for accountability to help reduce and slow climate change, especially government agencies.
- \* Don't reauthorize livestock grazing (our preference) or significantly decrease the number of cattle allowed on the allotments and shorten the season of use for better water retention and plant recovery.
- \* Significantly decrease the intensity of planned cattle use if grazing is reauthorized, including, in addition to planned pasture rotations and adaptive management, complete exclusion of cattle from

perennial creeks and badly damaged intermittent stream channels, as well as from expanded exclosures around springs to account for historic spring riparian zones.

\* Retain all large tree structure, including all mature juniper over 9" dbh and all other conifers over 9" dbh with the exception of limited trees up to 18" dbh for tree tipping for riparian restoration. This also helps maintain soil carbon sequestration over time.

\*Retain more soil sequestration of carbon and soil water retention by dropping heavy equipment use in areas that would exceed Forest Plan detrimental soil impact standards prior to mitigation, which is often not 100% effective.

Thank you for your consideration of these objections and our proposed resolution remedies. We look forward to meeting with you to work on a resolution to our concerns. Many remedies for resolution were suggested throughout our comments.

Sincerely,

Karen L. Coulter

Karen L. Coulter, Director, Blue Mountains Biodiversity Project

27803 Williams Lane, Fossil, OR 97830

(541) 385-9167

FENCE OFF EXCEPT FOR WATER-GAP AND PLANT RIPARIAN HARDWOODS.
AROUND POND.

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Describe:	d? Height? Estimate # of sprouts			

WILDLIFE: MALLARD DUCKS, STAKEOUS, DRAGONFLIES, GARTER SNAKE DOUGLAS SQUIRREL, CAT TRACKS GRING OR BOS CAT) COYOTE, PEED TRACK, NIGHTE BLEASTED NUT HATCH, POSSIBE COLUMBIA SBITED FROG TADPOLE, UNUSUAL PLANTS.

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe:

That NEXT TO CREEK. CATCLE TRANSLING OF POND EDGS W RELENT CONFIES. NO CATTLE PRESENT

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble)

in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: Heaving engageaged growle Stream and

LARGE BARE PATCHES AROUND THE POND. NO REPARCED PLANTS OR MAROUNDED'S EXCEPT FOR I WINDOW

ORY SIDE OF DAM. DNLY SARGE GRASSES

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

```
5 1051 RED DRAGON FLY
948 MAP
948 survey Hob
                                   1053 VIEW OF STUMPS TO
950 CHLVERT ON SOUTH SIDE OF 58
                                       MAKE POND
958 CULVERT ON N. SIDE - FISH PASSAGE
      OBSTRUCTION
                                       1054 GIRDLE JUNIPER
969 SMALL TO LARGE COBBLE IN CHANNEL
1000 SHALLOW CHANNEL LACKING RIPORION
      PLANTS
1005 MIKE AND STREAM CHAMNEL JAM
1006
      ROCKY CHANNEL VIEW
 1009 COWPLES & CATTLE TRAIL ALONG BANK
 1010 ERODED STREAM BANK
10/2
      POOL CREATED DY OG PP ROOTS
      CHANNEL FILLED N/ SEDMENT NEAR-
       MASSING CATTLE TRAMPLING AROUND POND
1016
1016 VIEW OF DENUNED GANKS OF POND
     SMALL FUZZY SWEET SMELLING PLANT
1017
      TINY YELLOW FLOWERS BUSING ARTEMESIA
 1017 RUNNER PLANT W/ THY PURPLE FLOWERS
       POINTED, TRANSULAR SIMPLE LEAVES W/MINUTE
       SERRATIONS
       HEAD OF GARTER SNAKE
 1021
        BODY
 1027 .
   1029 CAT TRACKS
        DOGTRACKS
   1033
   1037 DUCK TRACKS
   1038 WILLOW ON DRY SIDE OF DAM
        SPARROWS DRINKING
   1041
    1044
```

COYOTETRACK

Recommendations for allotment location:  Completely Breed Dam and Backer (541) 385-9167  Conduction of the contract of the con	DATE 9-4-20 NTL FOREST OCHOCO DISTRICT PAULINA Grazing Allotment SUNFLOWER
CNDS LEAVING ORIGINAL STREAM CHANNEL, POT ROCKS IN RESTORED REAM COURSE AND PLANT WEALLY SOURCED WILLOWS MONE BANKS SEP CATTLE OUT OF RIPARIAN AREAS. Subjective evaluation of area:	Location Coordinates N. OF AND AND, TO SE
Subjective evaluation of area:  CURRENT LINESTOCK BURDS NOT USEFUL FOR CATTLE OR WILDLIFE  AND SHOULD BE BREECHED	Surveyors Names'  NE OF FENCELINE  SE OF
Type of Allotment Site: Stream Spring Aspen Stand Other:	galvier Agassi, kanadi (15. 19. 19. 19. 1) halligress Disc. 1997
Stream Conditions:  Overall Description: WELL DEFENSED CHARLEL W/ MOSTLY LAKE C	OBBLE OND WILLDEN SPECIES, CURRENTY DRY.
WFORTUNATELY DAMMED TO CREATE TWO LINESTACK BADS, BOTH DRY. LACKING WHE  ADING  -Channel: FINE SEDMENT LIVESTOCK BADS,  Signs of I	ivestock damage: LARLE EXCAVATED LIVE-
: MIXED CONIGER Width vs. depth ratio: OKIN ORLGINAL CHANNEL STOCK	BADS DESTROYING MID SECTION OF
HO HARDWOD Bank stability: GOOD IN ONGINE CHANCE CHESCH POND CREE  HOUNG Meander or straight: MEANDER  Size of cobble: LARGE E MEDIUM	TOUR POND 15 DRY
Large wood: Aspen Alder Red Osier dogwood Will	ow Rocky Mt. Maple
Riparian Plants: NONE EXCEPT WILLOW  Exotic invasive plants: BULL THERE  Impoundments/livestock ponds/weirs: Z EXCAUATED LIVE STOCK PON  Spring Conditions:  Overall Description:	DS, DRY AND BADLY TRAMPLED.
Trough Springbox Source Fenced off to cat  Riparian hardwoods: Aspen Alder Red Osier dogwood Wil	tle? low Rocky Mt. Maple
Cottonwood Other: Riparian Plants: A	to be there were a man had been the
Exotic invasive plants:  Signs of Livestock damage:	- Total a
Spring flow/Amount of flow:  Trough: Animal escapement device:  Distance from Spring headwaters:  Extent of fencing around spring:	e into ground for overflow?
Aspen Stand Conditions:  # of live Aspen: #of Aspen snags # of Aspen I Young conifer encroachment/shading out of Aspen? From which direction (I	_ogs \text{\text{V}}?
Describe: Old growth/Large trees near Aspen? (>/= 21"dbh) How many? Distance from Describe:	m Aspen? From what direction (N/S/E/W)
Fenced? Condition of fencing, type of fencing? area size fenced, any break.  Describe:	
Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:	
PLANT COMMUNITY: SHOW DERRY, ELYS SEDEE,	

TYPICAL: DOGBANG, ARROWLEAF BAUSAM ROOT, GOLDENROOD, OR GRAPE, ASTER, OR. SUN FLOWER, SERVICE BETTRY WILD ROSE, BUNCHERASS, OR. CHECKERED MALLOWROT,

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: None RESENT.

Livery TRANSPORT AND DRY LIVERSTOCK ONDS

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: EXTENSIVE BARE GROUND AROUND LIVESTOCK PARTS. PATCHY HEDGING OF WILLOWS AND STRUCE BETRY AT ABOUT TO

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

```
1118 MAP
1120 MIKE W/ WILLOWS
1120 SURVEYADG.
    MORE WILLOWS
     CULVERTON SOUTH SIDE OF RD
1123 HARDSRABBLE RESERVOIR SIGN
    ADEQUATE CLIVERT
    CHANNEL W/MED to LG COBBLE
1126 PESSIBLE SPRING W/ WILLOWS
1127 DRY LIVESTOCK POND
1128 WEW DEFINED STREAM BED
      OLD STREAM CHANNEL ON N SIDE OF DAM
      W/ WILLOW
1134 MIKE W/ MULTIPLE WILLOW SPRIES
1153 Freilly, PINATELY compound, Blue green
   to have Radiating , from central stem
   6" unde 3" tall
```

CLASSIC EXAMPLE OF FO NOT IMPRITORING KIPARIAN KESTORATION DROJECT AND IR FENCE MAINTENANCE.

V.D	Recommendations Blue Mountains Biodiversity Project DATE 9-4-20
1	For allotment location: 27803 Williams Lane NTL FOREST CHOCO
FENCE OFF	Filtres RIPARIAN ADEA
WININ )-	ENCES AND LOCK THEGATE PER ON REDOSION DOGWOOD AND DOGWIE
OVER. OF	Subjective evaluation of area: IM/APM Supers
HOULD BE THE	SURVEYORS Names' NEAR FRAZIER / SEATED AS SUCH, STAKES WITHIN SEEP AREA NEXT TO SOME MUVE & KARD LOOKOUT CO
LED OSIER	DOGWOOD AND WILLOWS, ALL BADLY HEDGED INDICATING POSSIBLE MIKE & KAREN LOOKOUT CO
PROLOSURE	GOTES EMPREMENTALISMENT AND THE PORT OF THE PROPERTY OF THE PR
	Type of Allotment Site:  Stream Spring Aspen Stand Other:
	Stream Conditions:
	Stream Conditions:  Overall Description: SEED AND APPARENT SARAGE IN UMAINTAINED RARGAN EXTLOSURG FENGE W/ OPENGATES AND
. CA	OVERALL DESCRIPTION: SEEP AND STRANGED AND FRONT STREAM BOOK FOUND AND SOUTH SEEP HAD APPARENT
S1 .	-Channel: NAME AND BANKING BATEMAN WY WINDOWS AND THE STATE BADLY HEDE
	Fine sediment level: MUCK CONDITIONS Signs of Livestock damage:  Width vs. depth ratio: Pu Bably MORE WIDTH THEN COTTH RIPARIAN PLANTINGS BADLY HEITERD,
	Bank stability: ECODED DEAD OR MISSING
	Bank stability: <u>ERODEO</u> Meander or straight: <u>MEANDER</u>
	Size of cobble: None
	Large wood: NONE
	Dalas Mt Monle
	Riparian hardwoods: AspenAlderRed Osier dogwoodWillowRocky Ivit. Iviaple CottonwoodOther:
	Riparian Plants: Reparient Serves
	Exotic invasive plants:
	Impoundments/livestock ponds/weirs:
	Spring Conditions:  Overall Description: 2 0840US SEEPS BUT NO 08410US SPRINGS
	Trough Springbox Source Fenced off to cattle? YES, But Not MAINTAINED, CATTLE OPEN AT
004 440	Trough Springbox Source Fenced on to cattle? Tes, but Not Maintaine, willow Riparian hardwoods: Aspen Alder Red Osier dogwood Willow Rocky Mt. Maple
BIDE DAM	Cottonwood Other:
NCWG	Riparian Plants: WILLOW, RED OSIER DOGWOOD, RIAMRIAN SEDEE, STINKY CURRANT
FILE INSIDE	Exotic invasive plants:
KCLOSURE FENCING.	Signs of Livestock damage: ALL ABOVE
	Spring flow/Amount of flow:
	Spring flow/Amount of flow:  Trough: Animal escapement device: Ves But NO WATER  Pipe into ground for overflow?  Yes, But NO WATER  Distance from Spring headwaters:  NOO'  Extent of fencing around spring: Well Planked, UMMAINTAINED WITH OPEN GATES.  MANY BREAUS N
	Distance from Spring headwaters: 100
BANK-PIETUR	Asnen Stand Conditions: FENCING
	# of live Aspen: # of Aspen snags # of Aspen Logs
	Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?
	Describe: Old growth/Large trees near Aspen? (>/= 21"dbh) How many? Distance from Aspen? From what direction (N/S/E/W)
	Describe:
	Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?
	Describe:  Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:
	Uphort phront commission averages and a series of the seri
	2 T T T T T T T T T T T T T T T T T T T

PLANT LAMMONTY

RARE: SOAPBERRY

MIN CHICKADEE, CHICKE SPARROWS, GARTER SNAME, GROUSE FEATHER, BLUE BIRDS Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: Yes, Au wirm He EXCLOSURE AREA! Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: EXPENE OVERGRAZING IN RHCA AND IN THE VPLAND, HORRIBLY TRAMPLED STREAM BANKS AND FLOND PLANN. POSTHOLING IN GRODED STREAM Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.) 1353 -SEEP W/OVEIGRAZINGOFWIllow Photo # and description: 1239 EXTREME UPLAND OVERGRAZING AND TRAMPLYNG 1359 - BIRDS 1240 1400 1240 FRAZIER CG SIGN 1403 - BIRD 1465 DRIED UP TRAMPLED STREAM 1252 CATTLE RETREATING IN FENCED RED OF RIPARIAN AREA 125% FENCED OF RIPARIAN ZONE W/WILLOWS 1253 CATTLE TROUGH SURVEY HOG 1256 1300 MAP 1302 GRAZED LIKE A GOLF COURSE IN RHCA 1303 RECENT CONFIG ON GENE COURSE 1364 (3) Photos OF TORRUBLY TRAMPLED STREAM CHANNEL AND FLOOD PLAIN 1305 OVERGRAZED ALONG 1309 HEDGING OF RED DIER DOGWOOD WHOLE RED OSJER HRUB 1310 Willows W/ADJ. TRAMPLING 1312 OPENED RIPARIAN EXCLOSURE GATE 1318 PDOWN AND UNMAINTAINED RIPARIAN exclosure fencing 1813 FRESH COMPLES IN SEEP 1313 1315 BETTER VIEW OF DOWNED EXCUSIONE FENCE IN

(1348 TRAMPLED SEEP ARGA FORTHER UPSTREAM W/MIKE)

1316 BAOLY HEDGED, APPARENTLY PLANTED, WILLOW , AND RED OSIER DOGWOOD WITH STAKES.

1350 W/MIKE OVERGRAZED RIPARIAN ZONE
1361 OVER GRAZING ON TREAMBONK
1351 "

1316 HEDGED WILLOWS, N SEEP AREA

1353 CATTLE TRANS, COWPIES, BARG GROWND, HEITH HEDGING

Blue Mountains Biodiversity Project Recommendations NTL FOREST OCHOCA 27803 Williams Lane for allotment location: DISTRICT PAILINIA Fossil, OR 97830 TAKE OUT BERM AND Grazing Allotment SUNFLOW FENCE OFF FROM CATTLE 0 (541) 385-9167 Pasture EP THEM OUT COMPLETEN, Location Coordinates SW OF FENCELINE Subjective evaluation of area: WHO LE AUDIT MENT AREA COMPLETE Surveyors Names' DEVASTATED BY OVERLOGGING AND OVERBRAZING KAREN & MINE INCLUDING THE UPLAND FROMS. Type of Allotment Site: Other: Stream / Spring Aspen Stand Stream Conditions: Overall Description: 5TREAM BED END IN EXCAVARED LINESTICK POUR WHICH'S NEARLY SEASONAL STREAM AT BEST SHADING -Channel: Signs of Livestock damage: Fine sediment level: BUGELGRAZING OF BLICSEDGE TO CONIFER Width vs. depth ratio: MORE WIOTH THAN DEPTH SHADING POND AREA TRAMPLED Bank stability: BRODED BANKS Meander or straight: MEANDER Size of cobble: NONE OR LITTLE Large wood: Rocky Mt. Maple Red Osier dogwood Alder Riparian hardwoods: Aspen Cottonwood Other: Riparian Plants: (4) Longle wellow Exotic invasive plants: CHEAT GRASS BULL THISTLE Impoundments/livestock ponds/weirs: DAMMED STREAMBED TO FREM LIVESTACK **Spring Conditions:** Overall Description: Source Fenced off to cattle? NO Springbox Willow Rocky Mt. Maple Red Osier dogwood Riparian hardwoods: Aspen Alder Other: Cottonwood Riparian Plants 11 FOOT HIGH WILLOW ON BERM Exotic invasive plants: CHEATGRASS, BULL THISTLE Signs of Livestock damage:\_\_ Spring flow/Amount of flow: Pipe into ground for overflow?\_ Trough: Animal escapement device:\_ Distance from Spring headwaters: Extent of fencing around spring: Aspen Stand Conditions: # of Aspen Logs #of Aspen snags # of live Aspen: Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)? Old growth/Large trees near Aspen? (>/= 21"dbh) How many? Distance from Aspen? From what direction (N/S/E/W) Describe: Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:

DATE

	nes? Any stunted shrubs or tr	ricas of bare groun	d? Describe:	11.7	10	<u> </u>
			A Lat x		· ·	
	guidelines: Identify camera to ovide brief description of ph stream channel, trough, fen		er/time stamp, in	clude at least described in t	a dozen pho ne survey fo	otos per survey erm (stubble
	and description:	•				
UPSTREAM	BANK EROSION		£0.	63		
AND BANK	BEING GROWN OVER	2				: <b>-</b> 3
BY TYPIC	-AL PLANTS					
ENTIRE L	WESTUCK BUD SHOWING, OVERBRANDE AND	ING	(30)			
TRAMPLING	, OVERBRAZING AND	MIKE FOR	0.2		= 16	
OCALE				*	9.40	
DOWNSTREA	MOVED AROUND BOR	M TO GET				
- CMIN TI INCE	V ON TRAMPLETS G	SROUND ON				
<b>.</b> .	-					
<b>.</b> .						

Blue Mountains Biodiversity Project Recommendations NTL FOREST DC 27803 Williams Lane for allotment location: DISTRICT POULINA FENCE OFF WITH WATER GAP Fossil, OR 97830 Grazing Allotment SUN FLOWER PLANT RIPARIAN HARDWOODS OR (541) 385-9167 Location Coordinates GET RID OF BERM NW OF 5800 650 Subjective evaluation of area: SINCE THE LELWESTOCK POND IS Surveyors Names' NOT DESTROYING A STREOM, THE FY COULD RESTORE IT FORMIKE & KAREN WLLDUFE USE Type of Allotment Site: Aspen Stand Other: Stream Spring Stream Conditions: Overall Description: SMALL SEASONAL STREAM -Channel: Signs of Livestock damage: Fine sediment level: Width vs. depth ratio: Bank stability: Meander or straight:\_ Size of cobble: Large wood: Willow\_\_\_\_ Rocky Mt. Maple Riparian hardwoods: Aspen\_\_\_\_Alder\_\_\_\_Red Osier dogwood\_\_\_ Other: Cottonwood Riparian Plants: Impoundments/livestock ponds/weirs: LIVE STOCK POND, LARGE W/ SOME STANDING WATER N/ MANY ABY PACIFIC TREE PROSS. TRAMPLEDAU AROUND, STAGNANT WITH SOME A QUATU PLANT 3 BUT NO RAPARIANS
Spring Conditions: Overall Description: NonE Source Fenced off to cattle? Springbox Rocky Mt. Maple\_ Red Osier dogwood Willow Riparian hardwoods: Aspen Alder Cottonwood Other: Riparian Plants: , NO Exotic invasive plants: Signs of Livestock damage:\_\_ Spring flow/Amount of flow: Pipe into ground for overflow? Trough: Animal escapement device: Distance from Spring headwaters: Extent of fencing around spring:\_\_\_ Aspen Stand Conditions: # of Aspen Logs #of Aspen snags\_\_

Old growth/Large trees near Aspen? (>/= 21"dbh) How many? Distance from Aspen? From what direction (N/S/E/W)

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:

and the second s

# of live Aspen:\_\_

HORSE MANURE, COUGAR, BOBGAT, SHREN/MICE, COYOTE, PACIFIC TREETROGS, DEER TRAVE

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: NONG PRESENT

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: OVERGRAZING OF BUNCH GRASS

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

1519 OVERVIEW OF BIG LIVESTOCK POND AND

OVERGRAZING-1520 CONGAR TRACK

1520 CLOSER OF LIVESTACK PONO

1521 INDISTINCT SEASONAL DRAINAGE NORTH OF BERM

1523 POSSIBLE SKUNK TRACKS

1523 CLOSE UP OF POSSIBLE SKUNK

1524 (3) Photo of Pacific Tree Frog ON MIKE

1525 POSSIBLE SHREW TRACKS W/LOASE CLAWS

1525 2 POSSIBLE BOBCAT TRACK

1525 COYOTE TRACK

POSSIBLE MOUSETRACKS

1537 GRAZED FESCUE BUNCH GRASS

1539 LOCATION ON MAP

1539 SURVEY HEADING

Recommendations for allotment location:

KEEP CATTLE OUT OF UPPER TRIBUTARIES OF CREEKS. Blue Mountains Biodiversity Project 27803 Williams Lane

Fossil, OR 97830 (541) 385-9167 DATE 9-4-20

NTL FOREST OCHOCO

DISTRICT PAULINE

Grazing Allotment SUNFLOWER

Pasture

Location Coordinates Nov 5870 - 150

Subjective evaluation of area: BOTH CREEKS APPEAR TO HAVE BEEN SOF5870-100 PERAENIAL IN THE PAST. DISTURBED TO SEE THE OVER GRAZING WHICH SURVEYORS Names' EXWOF 5870 COULD CONTRIBUTE TO DRYING OUT, INCLUDING LACK OF RIPARIAN KAREN, MIKE PLANTS WEST OF ROAD 5870.

Type of Allotment Site: Stream Spring Aspen Stand Other:	B TANK SEE SEE HE WAS SEEN THE F
Ditomit	- Fig. 1 April 199 - 185 - W
Stream Conditions:	and the form of The 156
Overall Description: INTERMITTENT W SMALL TO MED. C	OBBIE. LACES CHARLAN FURNIST POCK
-Channel: 2 COLVERS UNDER RD.	BP. CLIC LANCIBIO, WELL DEPINED
-Channel: 2 COCOSIG ONDER RD.	Signs of Livestock damage:
Fine sediment level: OK	MIRED STUBBLE HEIGHT HEKANT NE
Width vs. depth ratio: BAD WIDTH TO DEPTH RATIA	ABOUT 2"
Bank stability: ERODE  Meander or straight: MEANDER	- Amuri
Size of cobble: MALL TO MED, ON BOTH STREAMS	
Large wood: LACKIALS	
	Willow Rocky Mt. Maple
Riparian hardwoods: AspenAlderRed Osier dogwood	WIIIOW V ROCKY WIL. WIAPIC
Cottonwood Other:	
Riparian Plants: Willow	inul DWF
Exotic invasive plants: VENTENATA LRASS & VELL	UN PUL
Impoundments/livestock ponds/weirs:	A Section of the sect
Spring Conditions:	Alternative at Authorities and
Overall Description:	
110ugii	d off to cattle?
	dWillowRocky Mt. Maple
Cottonwood Other:	The state of the s
Riparian Plants: 119921AN SEDGE, WILLOW,	
Exotic invasive plants: YOU DOCK, VENTENATA	GKASS
Signs of Livestock damage:	20.200. 384.86
C : C : I : S : S : S : S : S : S : S : S : S	. Bros Carrello La Baltan - Ast. Com
Spring flow/Amount of flow:	Pipe into ground for overflow?
Trough: Animal escapement device:  Distance from Spring headwaters:	THE RESERVE OF THE PARTY OF THE
Extent of fencing around spring:	The second and the second that the second
Company of the Compan	
Aspen Stand Conditions:	A CONTRACTOR OF THE PARTY OF TH
# of live Aspen: #of Aspen snags #	of Aspen Logs
Young conifer encroachment/shading out of Aspen? From which	direction (N/S/E/W)
75	
Old growth/Large trees near Aspen? (>/= 21"dbh) How many? D	istance from Aspen? From what direction (17672747)
Describe:	
	any hreaks?
Fenced? Condition of fencing, type of fencing? area size fenced,	dily oreans:
Describe: Aspen sprout condition: Hedged? Height? Estimate # of sprouts.	Describe:
Aspen sprout condition: racaged? racignt? Estimate # of sprous.	, 1802 - 145 - 94 - 14 TV, 17 A TV

Juniper PP Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: IRESENTS 70 THE EAS.

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: SHORT STUBBLE ADJ. TO CREEKS STUBBLE HEIGHT AS LOW AS

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

1621 COLUMBIS CLK SIGN ON EAST OF RD W/ CULVERT AND CHANNEL

1621 CULVERT AND BRAIDED STREAM CHANNEL W/of 5870

1622 SURVEY HOG

1622 CHEKER Spot Burker Shes on Robbit Brush

16-26

1627 Same BUTBEFLEY

1631 WBST ON Columbus Crk. Channel w/RV

1631 GEARZING LEVEL CHANNELS W/ CLIP BUARD

1632 Lone Willow in channel

1633 HEAVIER GRAZING TO ABOUT Z" STUBBLE ON

5. SIDE OF CHANNEL

1638 SUNFLOWER CRK 5/6N AND CHANNEL TO EASTGE 5870 WITH WILLOWS

1639 TWO BUE CULVERTS W/ SPLASH POOLS AND SEDIMENT VIEWFROM EAST

1639 TALL WILLOW IN CHANNEL EASTOF 5870

1640 - Z PHOTOS OF CHANNEL WITH WILLOWS

1640 - MERGE OF SUNFLOWER AND COLUMBUS CRKS AT FENCELINE

1641 BANK OF Willows over Merged Creeks

1641 PATCHINE GRAZING NEXT TO CREEK E. OF 5870 W/CLIPBOARD

1692 MIKE IN CHANNELTO EAST OF 5870 W WILLOWS AND CUT BANKS

1643-TWO CULVERTS ON WEST SIDE OF 5870 W/ BYOARD ROCKY CHANNEL 200 CINEC CHANNEL UPSTREAM TO WEST OF ROAD WY OVERGRAZING ON

1643 COWPIES IN CHANNEL

1644 CHANNEL DISAPPEARS W/ COMPLE AND OVER GRAZING 1700 STUBBLE HT AS LOW AS 20 2" W/CLIPBOARD ON

W SIDE OF RD 5870

ZIRY WURLTBURGLE, NULL FRENCE FILLERY BATHEL, GOLDEN MONTE GROWN SQUIRREL BUY GEAT, DOM'S BUTUES, RED BREASTED BLAT TRACKS, PYGMY NUTHATCH, MT. BLUEBIRD, PAIR SMALL HAWKS, DATE 9-5-20 Blue Mountains Biodiversity Project Recommendations NTL FOREST 27803 Williams Lane for allotment location: DISTRICT FONCE OFF W/ WATER GAP & Fossil, OR 97830 Grazing Allotment (541) 385-9167 PLANT RUPARIAN HARDWOODS WIND CREEK Pasture Location Coordinates N 0 = 5800-200 ANCEL ALLOTMENT WATEND of 5840 770 Subjective evaluation of area: POND COULD BE RESTORED TO SERVE GETTON 31 Surveyors Names' VUDUEG BELAUSE HAS AT LEAST 4 AQUATIC PLANTS AND MUCH UNRENT WILDLIFE USE AS WATERSOURCE. COULD BE GREATLY ENHANCED MIKE & KAREA BY FENCING OFF TO CATTLE W/WATERGAP AND PLANTING RIPARIAN HARDWOODS, MARGINAL GRAZING LAND AND SHOULD CONSIDER CANCELING ALLOTMENT, WELL IS HOGE SUBSIDY TO PERMITTEES TO PROFIT. Other: SPRING OR WELL BOX W/ BLEETRIC RIMP Aspen Stand Spring Stream Stream Conditions: Overall Description: -Channel: N/A Signs of Livestock damage: Fine sediment level: Width vs. depth ratio: Bank stability: Meander or straight: Size of cobble: Large wood: Rocky Mt. Maple Willow Red Osier dogwood Riparian hardwoods: Aspen Alder Cottonwood Other: RIPARIAN Riparian Plants: Duck WEED Exotic invasive plants: Impoundments/livestock ponds/weirs: BERMED MENNOMENT SPRING PED PROM UP HILL OR WELL FED **Spring Conditions:** Overall Description: Source Fenced off to cattle? Springbox Rocky Mt. Maple Red Osier dogwood Willow Riparian hardwoods: Aspen Alder Other: Cottonwood Riparian Plants: LIBACIAN SED GE + AQUANCS Exotic invasive plants: BULL THERE, VENTENATA GRASS Signs of Livestock damage: TRAMPLING, BARREN GRAUND, POSTHOLING MID Spring flow/Amount of flow: Pipe into ground for overflow? Trough: Animal escapement device: Distance from Spring headwaters: Extent of fencing around spring: Aspen Stand Conditions: # of Aspen Logs #of Aspen snags # of live Aspen:\_ Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)? Old growth/Large trees near Aspen? (>/= 21"dbh) How many? Distance from Aspen? From what direction (N/S/E/W) Describe: Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:

Other signs of cattle around the are	ea: Cattle trails, Cattle tracks, C	attle Scat, Cattle present? I	Describe: Les Cossen
Overgrazing in the area? What plan in inches? Any stunted shrubs or tree over the ov	nts or shrubs or tree species? He		grass or sedge (stubble)
CALBAZINE OVERCISCAS)NA			•
1 2 2			19
Photo guidelines: Identify camera u and provide brief description of phoheight, stream channel, trough, fend	used, include photo number/time oto. Have photos highlight the co cing, Aspen stand, etc.)	stamp, include at least a donditions described in the s	ozen photos per survey, survey form (stubble
Photo # and description:	_		
852 Z BULLS AT LIVESPOCK &	one one	<u> </u>	
853 VIEW OF POND W/ MK	TO MUDIETT POUD EDG	<del>र्</del> ग्स	
806 W S FOND BY THE	28 E ILCITATION		•
854 WEASER FAMILY TRACK			
855 DOG OR COYOTE TRACK			
18 ISHOD TRACKS IN MUID			•
OSI MAP	34 )	30.0	
858 SURVEY HEADING			
963 AGUATIC PLANTS, DUCK	WORD -	•	
905 10000000			
905 TRAMPLED SHORELINE A	AROUND POND		
ISMINITED TO SERVE TO	<i>0</i> • • • •		
906 GOLDEN MANDE GROUND SQ	DUIRICED _		
912 HOSE TO 2000 "	n		
912 HOSE TO POND FROM SAG	END-HOUSE UP THE HU		
913 EXPENT DE METONS TOU	PHILL SIDE		
914 SHORT STILLING			
914 SHORT STUBBLE, MOSTLY BARE	GROUND 1-2° STUBBLE	€I	
917 "			
• •			
918 2 PHOTOS OF AQUATIC PLOONTS			- h . 11
COSEL FAMILIA TO AZZ		•	
10-111111 -000-11	70		
GILL			
924 VIEW ACROSS POND W/MIKE			
127 RIPARIAN SEDER IN WATER,	GRAZED		
25 BUBCAT TRACK	8		
935 BUEBIROS			
J Walland			
937			
940 2 OCTURES OF OVERGRAZING BEYOND B	BERN TD WEST		
			£2
95) WELL BOX	*		

E HARDWOODS AND KI	27803 Williams Lane Fossil, OR 97830 (541) 385-9167	Nation State	DISTRICT PAULINA Grazing Allotment WIN	DRIVER
5	P BUT KEEP CAITLE A		Pasture Location Coordinates	B OF 5840 W OF 5850 BELOW N. SEC
POND, SO NOW THE PSITY IN THE AREA 134 LOUIS AND RED DEER DO SEND AND PLANT NATURE OF Allotment Site:	UNFORTUNATE SPRING IN FS SHOULD TRY TO RETU LOWERING AND LEVELING MEMODD AND USING WILDLE TO FORBS AND NATIVE GRADERS AND NATIV	SEZAME TIRE TOP DF BEL IFE FRIEND 154E3 TO COMP	Surveyors Names'  MIKE & KAREN  MIKE & KAREN  MI AND PLANTING  Y I ENCAME W WATE  ETE W/VENTENATA  COMMENTENATA	WENW OF SWOF 5850 REPARIAN HA ER GAP FOR V ERASS.
StreamSpring_v_123	spell Statid			Sala A step?
Stream Conditions: Overall Description:			115853415	30.5
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				100 March 100 Ma
Channel:	28.00 PM	Signs of Li	vestock damage:	SATURE CLASS
Fine sediment level: Width vs. depth ratio:	THE PROPERTY OF THE PARTY OF		The dominant of the same and	W - CIENT
Bank stability:	the state of the s	o Paskila	Marie Handle How	35 3705 3
Meander or straight:			4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	San Salah at Cal
	98,7434 	The state of the s	LACORE COMPANIES	1000 m 300 St
Large wood:	Alder Red Osier dogwo	and Wille	W Rocky Mt. Map	le v v v v
Riparian hardwoods: AspenCottonwood Other:			and the same of the	a paralise of them,
	V2/2018/4:		7.2 2	a the
Riparian Plants:		S 28.2 A C NO.	33 To 101 As 1	나 전에게 하는 장에 다
Exotic invasive plants: But	LL THISTLE, VENTENATE	a GRASS	27 (1977)	
Exotic invasive plants: But	UL THISTLE, VENTENATA ds/weirs: LIVESTOCK PAND	a Grass		
Exotic invasive plants: <u>BU</u> Impoundments/livestock pond Spring Conditions:	ds/weirs: LIVE STOCK PAND	was a garage	State Section 1985 Commission of the Commission	
Exotic invasive plants: <u>BU</u> Impoundments/livestock pond Spring Conditions:	ds/weirs: LIVE STOCK POAD  CONVERTED TO LS POAD	Der white	The state of the s	
Exotic invasive plants:	CONVERTED TO L5 PON	proced off to catt	le? <b>\</b> /\)	1227 Viles (2017) 1227 - Cales (2017) 1227 - Cales (2017)
Spring Conditions:  Overall Description: SPRING  Trough Spri Riparian hardwoods: Aspen	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw	proced off to catt	The state of the s	102 100 pro
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw	proced off to catt	le? <b>\</b> /\)	1227 Viles (2017) 1227 - Cales (2017) 1227 - Cales (2017)
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw	nced off to catt	le? Rocky Mt. Map	108 289 18 18 18 18 18 18 18 18 18 18 18 18 18
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TD LS POND  ingbox Source Fer  Alder Red Osier dogw  ATTAIL  TRANDLNIC, SCAT, BARE	nced off to cattyoodWill	le? <b>\</b> /\)	108 289 18 18 18 18 18 18 18 18 18 18 18 18 18
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw  CATTAIL  TRANPLING, SCAT, BARE  7 " TO BARE GROUND.	nced off to catt yood Will	le?NO ow Rocky Mt. Map overgrazing	bleHEVE
Exotic invasive plants: BM Impoundments/livestock pond Spring Conditions: Overall Description: SRMIC  Trough Spring Riparian hardwoods: Aspen Cottonwood Other: BRIPTION Exotic invasive plants: Signs of Livestock damage: Signs of Livestock damage: Spring Control of the control	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw  CATTAIL  TRANPLING, SCAT, BARE  7 " TO BARE GROUND.	nced off to catt yood Will	le?NO ow Rocky Mt. Map overgrazing	bleHEVE
Exotic invasive plants: BM Impoundments/livestock pond Spring Conditions: Overall Description: SRMC  Trough Spring Riparian hardwoods: Aspen Cottonwood Other: BRIPTION Exotic invasive plants: Signs of Livestock damage: Spring flow/Amount of flow Trough: Animal escapement Distance from Spring headw	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw  ATTAIL  TRAMPLNIK, SCAT, BARE  Z" +0 BARE GROOND.  I: device: vaters:	nced off to cattyood Will  F GRADND ,	le?NO ow Rocky Mt. Map overgrazing	bleHEVE
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TO LS POND  ingbox Source Fer  Alder Red Osier dogw  ATTAIL  TRAMPLNIK, SCAT, BARE  Z" +0 BARE GROOND.  I: device: vaters:	nced off to cattyood Will  F GRADND ,	le?NO ow Rocky Mt. Map overgrazing	ble HEIGH
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TD LS PSIN  ingbox Source Fer  Alder Red Osier dogw  ATTAIL  TRANPLINIC, SCAT, BARE  7" +0 BARE GROUND.  ic device:  vaters:  ring:	nced off to cattyoodWill  F GRADND ,	Rocky Mt. Map  OVERGRAZING  into ground for overflow	bleHEVE
Exotic invasive plants: BM Impoundments/livestock pond Spring Conditions: Overall Description: SRMIC  Trough Spring Riparian hardwoods: Aspen Cottonwood Other: BRIPTION Exotic invasive plants: Signs of Livestock damage: Spring flow/Amount of flow Trough: Animal escapement Distance from Spring headw Extent of fencing around spr Aspen Stand Conditions:	ds/weirs: LIVE STOCK PAND  CONVERTED TD LS POND  ingbox Source Fer Alder Red Osier dogw  Alder Red Osier dogw  ATTAIL  TRANPLING, SCAT, BARE  Z" HO BARE GROUND.  I: device: vaters: ring:	nced off to cattyoodWill  E GRADND ,  Pipe	Rocky Mt. Map  OUERGRAZING  into ground for overflow	bleHEVE
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  - CONVERTED TD LS POND  - Ingbox Source Fer  Alder Red Osier dogw  - TRANDLUIC , SCAT BARE  - Z" HO BARE GROUND.  - It device: - vaters: ring:  #of Aspen snags - at/shading out of Aspen? From white	nced off to cattyoodWill  F GROND ,  Pipe  # of Aspen I ich direction (N	Rocky Mt. Map  OVERGRAZING  into ground for overflow  ogs_ I/S/E/W)?	STUBBLE HELD
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  - CONVERTED TD LS POND  - Ingbox Source Fer  Alder Red Osier dogw  - TRANDLUIC , SCAT BARE  - Z" HO BARE GROUND.  - It device: - vaters: ring:  #of Aspen snags - at/shading out of Aspen? From white	nced off to cattyoodWill  F GROND ,  Pipe  # of Aspen I ich direction (N	Rocky Mt. Map  OVERGRAZING  into ground for overflow  ogs_ I/S/E/W)?	STUBBLE HELD
Exotic invasive plants:	ds/weirs: LIVE STOCK PAND  CONVERTED TD LS POND  ingbox Source Fer Alder Red Osier dogw  Alder Red Osier dogw  ATTAIL  TRANPLING, SCAT, BARE  Z" HO BARE GROUND.  I: device: vaters: ring:	nced off to cattyoodWill  E GRADND ,  Pipe  # of Aspen I ich direction (No. 1)	Rocky Mt. Map  OVERGRAZING  into ground for overflow  ogs  I/S/E/W)?  Aspen? From what direct	STUBBLE HEVE

RECREATION: HUNBERS CAMP ADS. AND OCCUPIED RV ON SITE

C	vergrazing in the area?	What plants or sh	le trails, Cattle tracks, Cattle	100 A	li II	2 41
ir —	n inches? Any stunted sh PINE E. JUNIPER	rubs or trees? Are	eas of bare ground? Describ	e: Low STUBBLE	t of grass or so	edge (stubble) PONDERU
_			F 4 7			
			A I I I I I I		4 . V	
	eight, stream channel, tro	ough, fencing, As	re photos highlight the condi- pen stand, etc.)	wons described in t	he survey forn	a (stubble
036	SURVEY HEADING-					
		N HEAVY TRANS	MPUNCT AROUND SHOWS SOME AQUANC	i.		2 4 H
E					0	
Mo	N15. NONE OTHER STE OF PERMET	ER 15 BAR	rev	<b>&gt;</b> ,	**	
MO Mo W7 A	NIS. NONE OTHE STE OF PERMET UGAE & DUCKWE	ER 15 BAR BED WIDT BA	rev	*		

1018 Willows W/ BARE CROUND

OVERGRAZING IN MEADIN

VENTENATA GRASS IN MEADOW

1020.

1021

1501

10/8 MORE WILLOWS É CATTAILS W/ BARE GROUND ON BERM

CATTLE TRAILLEROING TO LWESTOCK BOND WERERAZING IN SURRUUNDING AREA BARREN GROUND FROM OVERGRAZING IN MEADOW ONLY

Recommendations  for allotment location:  Composery Frace 3D  KREP CATTLE OUT! WILDLIFF FRIENDS FRACE TO FORTH FRACE TO Subjective evaluation of area: Very CRUDE IMPOUNDMENT DESTROYS BO-DIVERSITY W/ LIVE STOCK	NTL FORESTOCHOLO  DISTRICT PAULINA  Grazing Allotment WIND CREEK AUDTMENT  ANOWED Pasture  Location Coordinates W. OF 5850 AND FENCE  Location Coordinates SW CREATER OF SECTION
Type of Allotment Site: Stream Spring ✓ Aspen Stand Other:	per men grand from the perfect the transfer of the perfect that the perfect the perfect that the perfect tha
Stream Conditions: Overall Description:	
-Channel: Fine sediment level: Width vs. depth ratio: Bank stability: Meander or straight: Size of cobble: Large wood:	Signs of Livestock damage:
Trough Springbox Source Pence	LEAN LAND AND AND THE TOTAL LAND TO A COLUMN TO A COLU
Riparian Plants:	
Distance from Spring headwaters:  Extent of fencing around spring: NONE  Aspen Stand Conditions:  # of live Aspen: # of Aspen snags #  Young conifer encroachment/shading out of Aspen? From which  Describe:  Old growth/Large trees near Aspen? (>/= 21"dbh) How many? I  Describe:	
Fenced? Condition of fencing, type of fencing? area size fenced. Describe:  Aspen sprout condition: Hedged? Height? Estimate # of sprouts.	

Blue Mountains Biodiversity Project 27803 Williams Lane

DATE 9-5-20 NTL FORESTOCHOLD

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: No COUS MESENT Describe: No COUS MESENT Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: Fau unloss on or of EXCAVATION. SMALL, OVERCRAZING ALL AROUND

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

```
1058
       MAP
 1058
      SURVEY HOG
1059
      EXCAVATED LIVESTOCK POND
      REMAINS WATER WITH OVERGRAZING
1100
1101
      FENCE POSTS AND CAMPFIRERING
1002
     CATTLE TRAMPLING IN RUSHES
1103
     COWAES ON RUSHES "
1104
     GARTER SNAKE
 P
```

1106 DEER TRACK 1109 DRAGONFLIE MATTRES DRAY VIDEO & STILLS

1114 VIDEO 1115 VIDEO FILL STIPLS

·UUN PEKS

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

1219 MIKE W/ SURVEY SHEET AND STAND OF BOUTHSTLE
1220 - Slumping, Barren banks over creek
1221
1221 CATTLETRAIL AND BARREN GROUND AND OVERGRAZING

1221 Trampling of stream bank w/compiles and host shearing
1221 BROAD ROCKY CHANNET UPSTREAM, VERY LITTLE WATER
1226 ON RD 5850 SHOWS TRUCK AND CHINGET

1246 COWPIE IN WATER 1249 SLUMPING BANK MOVING INTO STREAM

	Recommendations for allotment location:	Blue Mountains Biodiversity 27803 Williams Lane	NTL FOREST OCHOCO	
ANCEL	CATTLE ALLOTHENT ON	Fossil, OR 97830	DISTRICT NAULNA Grazing Allotment WIND CLEEK	
PRINCAMI	EVIDENCE THAT ONLY COSTU IN AND EXCUSURE FENCING	WILL RESTORE HISTORIC	AL ECOLOGICASTURE SQUAN CLEEK.	se of culver
HEALTHY	CONDITIONS FOR MATIVE S Subjective evaluation of area: The	PECIES  E FEWER LINE EXCLOSURE 8H	bus not	FEACE
EVERYTH FS WIL	THE NOT IN EXCLUSIONS WILL I NEVER FENCE RIPARIAN	, BE DESTROYED BY CATTI ( AREAS THE ONLY WAY F THE RIBBIAN ECOSYSTAMA	ORWARD KALEN & MIKE N of 5850	- 401
13 75 Gett 1	ANCEL THE ALCOMENT.  AGE RID OF THE CATILE . A  Type of Allotment Site:	LOFTHE FOREST'S CREE	KS SHOULD LOOK LIKE THIS EXCLOSURE	
	Stream Spring Aspe	n StandOther:	A-MAN (1994) 4 M F4 607	
	Stream Conditions:  Overall Description: CLOSE 72	OR AT REFERENCE CO	NOTION BECAUSE OF EXCLOSURE FENC	& AND
IPARIAN	LESTORATION EFFORT IN	ICNDING LARGE WOOL	PLACEMENT	
	-Channel:	MANAGED STATES OF THE STATES O	Signs of Livestock damage:	F *
	Fine sediment level: OK Width vs. depth ratio: Goo	O Maria Maria di M	NONE INSIDE EXOLUSURE FENC	<u>e</u> !
	Bank stability: Good		TVOICE TO THE TOTAL TOTAL TO THE TOTAL TO TH	
	Meander or straight: ME			
	Size of cobble: SMALL		29 20 20 1 20 20 20 1 20 20 20 20 20 20 20 20 20 20 20 20 20	
	Large wood: YES 2 AN	D MANY IN RESTORATION		
	Riparian hardwoods: Aspen	_Alder Red Osier dogwo		
	Cottonwood Other:		The a promount CETTER (2 VILLE) SCOUL	BING RUSH
	Riparian Plants: New Protice investigation plants:	NORT, MINT, CRESPING C	HARLIE, RIPARIAN SEDGE (2 KINDS ) SCOUL	
	Exotic invasive plants: Bus 7 Impoundments/livestock ponds/		group and the second of the se	
	-	WORD.	The second could be a second by the second b	
	Spring Conditions: Overall Description:		and the second s	
	Overan Description.	1 S2 H105F 1		
2	Trough Spring		ced off to cattle?	
	Riparian hardwoods: Aspen	Alder Red Osier dogwo	oodWillow Rocky Mt. Maple	
	Cottonwood Other:			*27
	Riparian Plants: A EPHE Exotic invasive plants: SAEPHE	EDS AIRSE, BULTHISTLE	AND THE PROPERTY OF THE PROPER	
	Signs of Livestock damage:	AD MESE, WILLIAMS	10 APA - 1 APA -	
	bighs of hivestook damage	A STATE OF THE STA	representation and the control of the	
	Spring flow/Amount of flow:	The Carlo		_
44.5	Trough: Animal escapement dev		Pipe into ground for overflow?	-
	Distance from Spring headwate		A CONTRACTOR OF THE CONTRACTOR	_
	Extent of fencing around spring			-
	Aspen Stand Conditions:		A STATE OF THE STA	•
	# of live Aspen:	#of Aspen snags	# of Aspen Logs	138
	Young conifer encroachment/sh	ading out of Aspen? From which	h direction (N/S/E/W)?	
	Describe:	ang (>/= 21"dbb) Hovy many?	Distance from Aspen? From what direction (N/S/E/W	Ŋ
	Old growth/Large trees near As Describe:	pon: (//- 21 don) now many!	District Hom I mpont I for white dropmon (17012)	<b>*</b> a
	Dosoriuo.	The state of the s		<del>-</del>
	Fenced? Condition of fencing,	type of fencing? area size fence	d, any breaks?	•
	Describe:	teld typith litter i		
	Aspen sprout condition: Hedge	d? Height? Estimate # of sprouts	s. Describe:	

713 - 12 A

WILD ROSE, CA. FALSE HELLEBORE, MIMULUS GUTTATUS, SLOVENU RUSH

Overgrazing in the area? What plants or shrubs or tree species in inches? Any stunted shrubs or trees? Areas of bare ground?	s? Height of hedging? Height of grass or sedge (stubble) ? Describe:
E 200 C21	
<u>Photo guidelines:</u> Identify camera used, include photo number and provide brief description of photo. Have photos highlight height, stream channel, trough, fencing, Aspen stand, etc.)	r/time stamp, include at least a dozen photos per survey, the conditions described in the survey form (stubble
Photo # and description:	1357 PICTURE OF POOL W/LOG
311 SURVEY HOG 311 MAP 1312 MIKE WCULVERT, FENCE AND DRY CREEK BED V	1400 MIKE THINKING BEHIND GLOER_ 1400 -> 1402 RED BAND TROUT N/WILLOWS 1402 Prov. P.
313 FENCELINE DIFFERENCE SE OFFENCE	LING TALL CORES
1315 SHOW GAP BELOW BEFENCE	1404 ALDER OVER STREAM W/ WOOD
315	
1315	1406 RED BAND TROUT IN POOL
1318 CHUERT W NETTLES, MINT MUGUORT 1322 WILLOW PLANTS IN CHANNET. 1324 MERDOW NOT GRAZEP RECEIVING 1324 WAIST HIGH GRAGES	1409 ANOTHER POOL W/LARGE WOOD.  1411 UNIDENTIFIED RED CLOVER_ 1412 "
1325 ELKBEDS IN GRAGS	1 GETWEEN THE DIFFERENCES
1334 DBH DF 68.7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1335 UPTRUNK 1	1415
1336 MIKE AT BASE OF DE	7
1338 HORNET NESTIN MEADOW	1415 MIKE WITHIN EXCLOSURE ONLANDE WOOD
	1411 ERODED BARREN BANK ABOVE CREEK OUT
1339 TALL WILLOWS IN CHANNEZ 1340 SINGE ALDER 1340 VIEW IC REP	
MINT CREPING CHANNER WITH	1416 Same?
MINT CREEK CHANNER WITH	1416 CREEK W/ NO RIPARIAN PLANTS EXCE
MINT, CREEPING CHARLIE AND WILLOWS	1416 STORING CHARLIE
1344 MARON 11.1	14/6 STRAIGHT ACROSS FENCE LINE DIFFER
1344 WATER W. WILLOW AND RIPARIAN SEDGE	1918 AT FINCE LOOKING WICKER
MURIAL WISEED HER	ADS "10 LOOKING ACDAGE FOR LA
VVAJEIZ LAKGE WOOD REPARIED CODY	SEEDHEADS 1426 DRAGON FLIES
1750 - 10	
1351 MIKE W/ WILLOWS & ALDERS.	1448 SOOURING PLUSH W/LOGS
- 2 loss in FLOOR PLANTING & ALDERS	14450 CULIERT UNDER 5850
HNO (CICAPIA) STACE	IUUC TRAUT ! A
1 3 1045 PLACED IN FLOOD FLAIN W/ RIPARIAN	1447 11 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10
TO WAY WILLIAMS	1445 TROUT IN POOL 1447 " " " " " " " " " " " " " " " " " "
F 3 - 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1449 " (149) "
53 MIKE WALKING TITEROPE 5 ANOTHER SEDGE W/ DIFF SEEDHEAD	1450 " COMPANA MARIENTE

	Recommendations Blue Mountains Biodiversity Project	DATE 9-5-20
	for allotment location: 27803 Williams Lane	NTL FOREST OCHOCO
CANCA	- AUOTMENT OR Fossil, OR 97830	DISTRICT PAULINA
		Grazing Allotment/WIND CREEK
PENCE	OFF AND RESTORE (541) 385-9167.	Pasture
CREEK	PLANT HARDWOODS IN FLOOD PLAINDAWY IF CAI	Location Coordinates W of 5890
ARE K	Subjective evaluation of area: CLER (S) Block WELLETINED SO UNCLE	NOF FENCELING
14 11 16	IT'S NOT A PERRENIAL CREEK, I WOULD TO KNOW	
WAY	113 NOT A PERCENTING CHEST STORY	
WHE	THER CREEK WAS HISTORICALLY PERRENIAL	MIKE EXAREN NOF 5830
	prince are exploited areas in relating a appropriate director and the Latin Section (1997).	
	Apparation of the second City of	regar grant gr
	Type of Allotment Site:  Stream Spring Aspen Stand Other:	
	Stream Spring Aspen Stand Other:	SERVICE SERVICE AND ADDRESS OF THE SERVICE AND A
	Stream Conditions:	337464757 207 17060180
	Overall Description: DRY W/O OBVIOUS REASON BASED OF	N SIZE AND OBFINITION OF CHANNE
	Committee and sometimes the sound of the sou	COLUMN TO SERVICE SERV
rate de la constante de la con	-Channel:	25 A. C. L. C.
	Rine sediment level: 4144	of Livestock damage:
IDE ALL	Width vs. depth ratio: MAIN CHANNEL FAIR OUDLE	GRAZING BOTH SIDES OF CREEK
DAD	Bank stability: MOSTY ERODED AND BE	TWOSH CHANNERS, SLIMPING BONKS
BAD	Meander or straight: MEANDER LOW	PIES.
	Size of cobble: SMAU TO MEDIUM	ANY SEDIMBNY LOAD AND LACKING
6.3000		CIPARIAN PLANTS
	South South	2011년 - 일본 - [] (프리카트 - 2012년 전 1200년 - 1000년 -
	Riparian hardwoods: Aspen Alder Red Osier dogwood V	Villow Rocky Mt. Maple
Mark.	Cottonwood Other:	Mr. Andrews Comments of the Co
	Riparian Plants: MUGWORT	pos (10 ym mil) I
	Exotic invasive plants: Buc This TE	
	Impoundments/livestock ponds/weirs:	STORY STANSON OF THE
	V 3,64	
March 1	Spring Conditions:	
	Overall Description:	
747		WI O
20116	Trough Springbox Source Fenced off to	
DING:		Villow Rocky Mt. Maple
NIFER_	Cottonwood Other:	
	Riparian Plants:	7 - 5 - 50 FO TO TO TO TO THE STATE OF THE S
	Exotic invasive plants:	
	Signs of Livestock damage:	
	4 2 Ma 2 Mars	Share The restriction of the Control
	Spring flow/Amount of flow:	•
	Trough: Animal escapement device:	ipe into ground for overflow?
	Distance from Spring headwaters:	
	Extent of fencing around spring:	Section Section 1994
•	Aspen Stand Conditions:	All and the second
	# of live Aspen: # of Aspen snags # of Aspen	n Logs
	Young conifer encroachment/shading out of Aspen? From which direction	
	Describe:	SERVED TO THE SERVED AS A SERVED OF THE SERVED AS A SERVED AS A SERVED OF THE SERVED AS A SERVED OF THE SERVED AS A SERVED OF THE SERVED AS A SE
	Old growth/Large trees near Aspen? (>/= 21"dbh) How many? Distance for	rom Aspen? From what direction (N/S/E/W)
	Describe:	was a supplied a total training and deliberate (all of the training
	Describe.	and the last expensive that the last th
	T 10 G 1tt 66 i 4 65 i 6 1 1 1	dea0
	Fenced? Condition of fencing, type of fencing? area size fenced, any brea	IKS!
	Describe:	
	Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe	

CONTRACTOR OF THE CONTRACTOR OF THE PROPERTY O

NETUUN NE, HUG

BOBLAT SLAT WOODBELKER, WEASEL PRINTS? BOBLAT TRACKS, MOUSE/SHREW TRACKS

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: DF JUNIFER SNOW BERRY BEING-HEDGED (SE HOD Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.) 1613 BARE GROUND WITH SHORT STUBBLE HEIGHT Photo # and description: BETWEEN CHANNEL . COWPES \$ 1541 SURVEY HD6 1614 COBBLE IN SIDE CHANNEL 1841 MAP 1625 STUBBLE HEIGHT RIGHT NEXTED STEAM 1550 CREEKBED AT FENCE LINE STREAM BED OF SECONDARY CHANNET VERY WIDE MY COBBLE 1550 BIG MEANDERING BED W/COBBLE 1625 OF HER SIDE OF BANK OF SECONDA CHANNEL 1626 EXTREMELY SHORT STUBBLE HEIGHT IJKI CREEK BED & FOREST NEXT TO MAIN CHANNEL 1551 - " 1552 MIKE AT BEND IN CREEK DED 1627 BULL THIS THE RIGHT NEXT TO MAIN STREAM CHANNEL 1553 WERCHARING NEXTTO CREEK 1628 1554 BARE GROUND OVERLERAZED WYCOW PIES 1630 SNOW BERRY ON STREAM BANK AWAY FROM CREEK HEDGED 1558 PARTIALLY OVER GROWN W/ TYPICAL HANTS 1630 HEDGED SNOWBERRY W/ BIG MEANDER & TREE ROOT Prous 1634 LIVESTOCK POND, TRAMPLED POSTHOLED, BAREGROUND, OVER 1559 ERODED BANK GRAZED 1600 VERY ERDED BANK W/OVERLARATING 1635 OTHER END OF POND DEEP POOL IN UNDERCUT BANK SAME AS ABOVE 1601 HEAVY SEDIMENT ERODING INTO CLEEP BED 1635 SEWAGE-LIKE WATER. BIG MEANDER W/ ROOT WAD CAUSING POOL 1639 BOBCAT PRINT W/ LARGE COBBLE 1640 1603 MEANDER W/ UNDERCUT GANK BUT JOO 1642 LONG TOED PRINT 1643 COYOTE TRACK MUCH FINE SEDIMENT 1644 MIKE AT POND LARGE WOOD IN CHIANNEL 1645 MIKE W/ HEAVY OVERGRAZE 1605 SLUMPED BANK ABOVE POND 1606 BIG CHANNEL MEANDER W/ CONIFER SHADING PP, DF, GF

1608 DOWNSTREAM OF LOG DEBRIS JAM

1608 UPSTREAM DEBRYS JAM HOLDING BIG AMT OF SEDIMENT

1610 SNAGS LIKELY TO ADD TO LARGE WOOD IN CREEK CHANNEL

1611 MAIN CHANNEL

FOR NEW AREST NEW A	commendations allotment location: ENCE TO EXISTING MED CATUS OUT OF AU CASSK.	27803 Wi	nntains Biodiversity P Iliams Lane R 97830 -9167	A Zides of The desired Lichard of the Colored	DATE 74-2 NTL FOREST OF DISTRICT PAR Grazing Allotment Pasture Location Coordinate	CHOCO LUNA SUNFLOWER COVERE	CREEK 58-800
Sul	bjective evaluation of ar	ea: CARLA DAN	ALE SO PHOTENSIVE			N AND C	of RD 806
REQUIRE WE	LL-MAINTAINED F	ENCE ARMAIL	ENTIRE DRAIN	ASE AND	Surveyors Names'_	11	. /
D. Oronada DI 4	ANTED TO REPAIR	AND STABILIES	THE BANKS EXT	RAME RIGH	PRIBAL PUT	KB & KARL	<b>₹</b>
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	and the second of the second	GENCE,			specifies and posts		
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Str	eamSpring	Aspen Stand	Other: Seep oN	WEST SA	DE OF STREAM		£.
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	erall Description: MEANNEL ENGENISIV		, SEVERELY UNDE	FROUT É L	DOWNCUT BANK	5. BANKS S	LUMPING IN
-Ct	nannel:	209				THE UNIT OF	1711
O.	Fine sediment level:	RAD	- 308	Signs of Liv	vestock damage:	A BANKER A	
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	Bank stability: VER	Y BAP	E M 5.440	75.7	DEV THE VALUE	Suddistra	
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	Size of cobble: 80	NAW TO LA	REE	Principal region	STORESHEET SMALL	gitate flat ngipitiya — in i	
	Large wood: LITTLE		The second states	NOTES AND	ann do Sei	Methods It	
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Imp	poundments/livestock p	onds/weirs: <i>Nor</i>	JU	•			
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	parian Plants: A MINT	- WILLOW		The same of the	and the other seconds.		
	otic invasive plants: Bu			2197	ed perfect managed in a	rahijadiVele 🐧 😘	7
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			el sur lic	Anales Al	An example of	vi men esub	1 34 17 7
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	ung conifer encroachme					a few and the	
De	scribe:	10000000	Secretaria de la contrata a	4-11-1		1. 2. 1. 4. 4.	
Ole	d growth/Large trees ne	ar Aspen? (>/= 21	"dbh) How many? Dis	stance from	Aspen? From what d	lirection (N/S/E/W	7)
	scribe:	3/2	adadhidan adinar	GREEN WAR LEVEL	of Blanding office	THE PARTY SET	11
-			Σ,,	0 -		RMF	-
	nced? Condition of fend	ing, type of fenci	ng? area size fenced, a	any breaks?		T 27	
. De	escribe:			- 11 W 41 P 12	SOLD SWEETS SILL III AF	OFFICE A STATE OF THE STATE OF	
As	pen sprout condition: H	.edged? Height? F	estimate # of sprouts. I	Describe:	THE PERSON NO. 124	2 1 N 1 N 1 N 1	_

HAVEN WOODPECKER SEEN, KED TAIL HAWK FEATHERY WILD HURSE, DOUGLAS TUNINCEL, FEW !!

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe:

DOWN CUTING OF BANK CATTE TRANS OF NEXT TO CLESS

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of hare ground? Describe:

THAN I'' WILLOWS ROSENT (YEW) ARE HEAVILY HEDGED

<u>Photo guidelines:</u> Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

```
Photo # and description:
1719 SURVEY HOG
 1720 MAR
 1720 OVERLGRAZED CONDITIONS N. of 806
  1721 STUBBLE HT AND COWPIE. STUBBLE 1" siless
  1722 FISH PASSAGE BARRUEL IE. CULVERT TOO HUSH
  1723 DOWN CUTTING OF STREAM CHANNEL TO N of 806
  1725 INTENSE OVERGRAZING WYLOTS OF CONDIES N of 806
  1726 CATTLE TRAMPLED STREAM BOD
   1726 EROPED STREAM DANKS AND OVERGRAZING
  1727 DUWN CUT BANK, MEANDERING ROCKY CHANNEL AND
    DVIZRERAZING
 1732 OVERERAZING W/CUPBOARD
 1733 FENCE LINE DIFFERENCE VISIBLE
  1734 LEFT SIDE OF FENCE LESS GRAZID MEADOW TO NORTH
  1734 THEN FENCE N. TO LESS GRAZED MEADOW
  1741 S. OF ROAD 806 EXTREME OVERGRAZING N/CLIPBOARD IN DISTANCE
   1741 CLOSE SHOWING HOW Short stubble is
   1742 CULVERT & OVERGRAZING
1743 ROCK MEANDERSNG CHANNEL MY OVERGTAZYMG
1744 MEANDERING CHANNEL W/ SLUMPING BANKS
      AND OVERGRAZING
1745 STUNTED, BROWSED WILL 7.5 HIGH
 1746 STUNTED WILLOW IN CREEK CHANNEL
  1744 SLUMPING BANKAND OVERGROUN CHANNEL
  1747 MEANDERING WITH DOWNCUT BANKS W/SEDIMENT LOADING
   1748 CLOSE UP OF SEDIMENT LOADING
   1749 MEANDERING CHANNEL WY SLUMPING BANKS AND EXCESS
    1749
    1749
    1752 CONTINUED OVER GRAZING & DOWNLUT BANKS
     1753 BANK COLLAPSING INTO CHANNEL
     1753 BROWSED WILLOW 5'that
     1755 MIKE POINTING OUT SEDIMENT LADING & OVERCEMBING COMPLES
      1866 OF PP ADS. TO CREEK
```

roject DATE 9-5-20

NTL FOREST OCHOCO

DISTRICT PROUNAL

Grazing Allotment VIND CREEK

Pasture

Location Coordinates W of 5890

Nof FENCE LINE

NE OF 5830-661

Surveyors Names' & OF 5830-600

WIKE EKAREN NOF 5830

09/05/2020 15:41

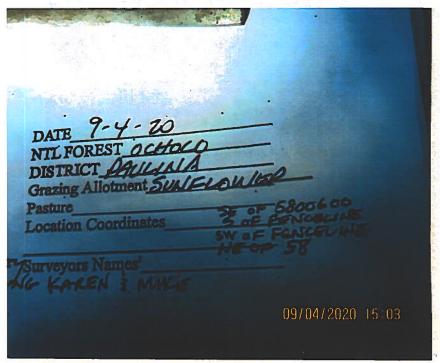


5:50 big meandering creek bed with cobble-strangely dry



15:52 Mike at bend of large creek bed-entire vicinity is overgrazed by cattle

Recommendation: Cancel the allotment or fence off and restore creek-and other riparian areas. Plant hardwoods in flood plain only if cattle are kept out. Subjective cevaluation: The creek bedis big and well defined, so it's unclear why it's not a perennial creek. I would Tike to know whether the creek was historically perennial.



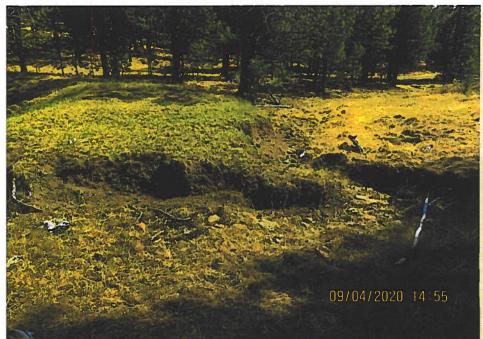
Recommendation: Take out the livestock pond berm and fence off from cattle or keep them out completely. Subjective revaluation: The whole allot ment area is completely devastated by overloging and overgrazing; including the upland areas.

Riparian conditions: The Stream bedends in an excavated Tivestock pond which is nearly dry-with a seasonal stream at best. Stream conditions: channel: conifer shading, but with to-depth ratio (wider than deep), eroded stream banks, meandering channel with little or no cobble. Riparran plants: one Tonely I foot tall withow The Stream was dammed to form the Tivestock pond, eliminating downstream flow



14:55 - a view of the livestock pond showing cattle trampling, I overs mising throughout the broader area





Suntlower allotment-SE of 5800-600 58 SW of fence Pine, NEaf 58 Paulina Distirt, Ochoco National
Forest

4:55 The steam channel moved around the bern to flow our stream 4:522 upstream bank crosian





14:542 the streambank being grown-over by typical upland plants as the streambanks erode

Livestock damage:

Overgrazing of elks edge to short stubble, pendaren heavily trampled, with compacted 30 its, dammed stream channel blocking downstream flow for livestock pend, and, one ripariand hardwood (I willow) and no other riparian plants, invasive plants: cheat grass and Bull Histle

DATE 9-4-20

NTL FOREST OCHOCO

DISTRICT PAULINA

Grazing Allotment SUN FLUIUSE

Pasture

Location Coordinates SE OF 5800 600

NW OF 5800 650

Surveyors Names' NE OF PANCELING

MIKE & KANEN





Recommendation:

5800513

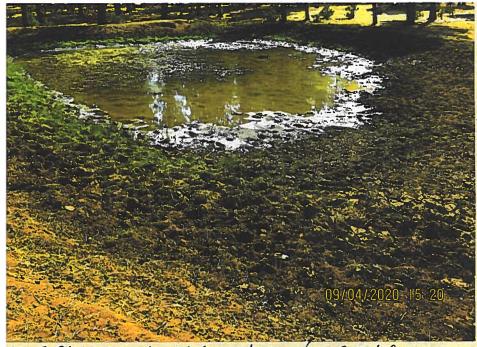
Fence off the area around the Tivestock pond with a water gap if the allotment is reauthorized. Plant riparian hardwoods and/or get vid of the berm.

Subjective evaluation:

Since the Tivestock pand is not destroying a stream, the Forest Service could restore it for wildlife use.

Riparian conditions: a small seasonal stream and a Targe Tivestock pond with some standing water-with many young tree frags; trampled all around, stagnant with some 1x. aquate plants but no riparian hardwoods.

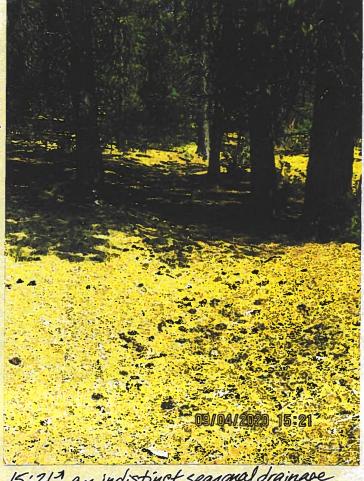
15:19 Niew of Tivestock pond with overgrazing all around it.



Sunflower
allotmentNE of 58 rd.
SE of 5800-600
NW of 5800-650
NE of fence line
Paulina District
Ochoco
National
Forest

5:20 an apparent Consar track, based on size, shape, no claw prints





15:21 an indistinct seasonal drainage north of the berm-grown over channel

Livestock clamage: cattle-trampling around pond, overgrazing throughout the broader area, cattle tracks, cattle scat, overgrazing of bunch grass—no cattle present.

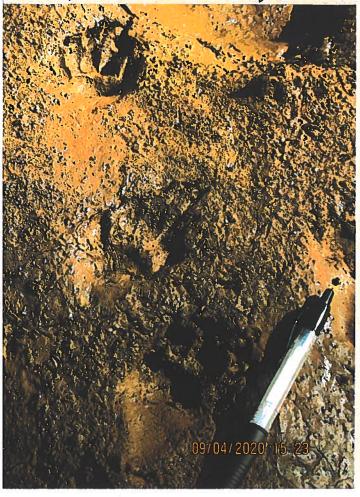


Wildlife sign:
many young Pacific tree frogs,
horse manure, congar tracks
bobcat tracks, shrew/mice
tracks, likely skunktracks,
deer tracks

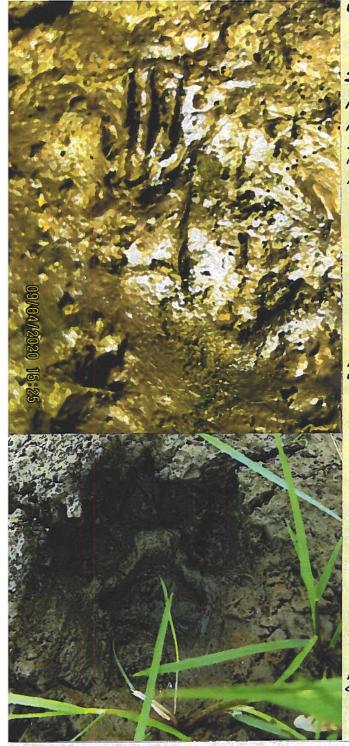
15:242 a young Pacific forton Mike's arm

Sunflower all otment-7: vestock pand at NE afrd 58, SE of 5800-600, NW of 5800-650,8 NE Paulma Ranger District, Ochoco National Forest of fenceline

15:232 possible skunktracks by the livestock pond 15:232 close-up of a possible skunktrac,







Sunflower
allotmentNE of 58 rd.,
SE of 5800-600,
NW of 5800-650,
NE of fence line
Paulina
Ranger District,
Ochoco
National
Forest

15:25 possible Shrew tracks with long Claws

15:25 L'alikely Coyotetrack



15:37 - Grazed bunch grass

15:272 possible mouse tracks by the Tivestock pond



9-4-20 NTL FOREST OCHOCO DISTRICT Grazing Allotment SUNFLOWER Pasture NOF 5870 -150 **Location Coordinates** SOF5870-100 Wor 5870 Surveyors Names'\_ KAREN, MIKE 09/04/2020 16:22

Recommendation: Keep cattle out of upper tributaries of creeks as well as out of main creek channels.





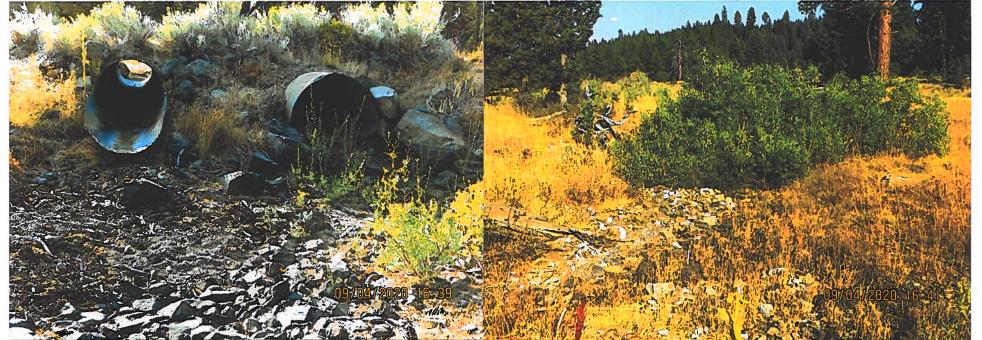
16:217 Culvert a braided stream channel West of 5870 rd. 16:217 Columbus Creek east of rd with culvert and barren, exposed channel with no riparian plants Subjective evaluation: Both creeks appear to have been perennial in the past. It's disturbing to see the overgrazing which could contribute to the creeks drying out, such as through Tack of riparian hardwoods to stabilize creek banks and shade the creek, aiding in water retention.

> Riparian conditions: Overall description: Intermittent creeks with small to needrum cobble, lacking riparian Plants in stretches, big culverts in good shape, Sunflower Creek is larger, well defined rocky channel-2 enliests under the road. Fine sed iment Tevel-o.k., bad width-todepth ratio; eroded banks, meandering channel; lacking Targe wood; Timited Willaws and riparian sedge; mixed stubble height-height near road about 2 inches.

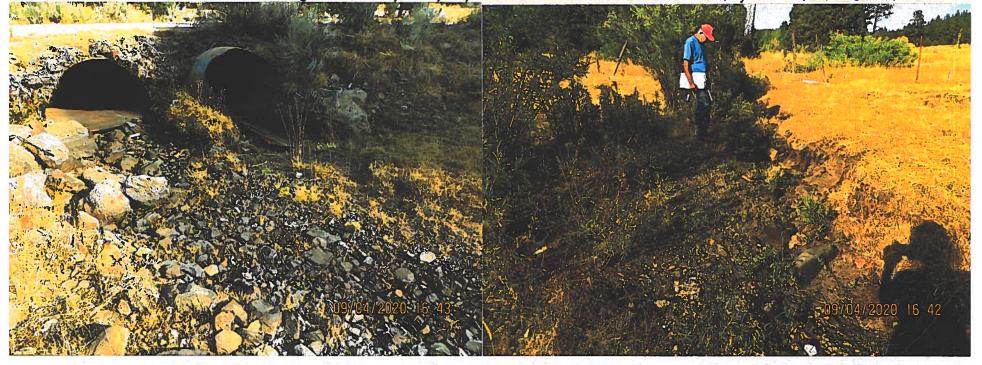


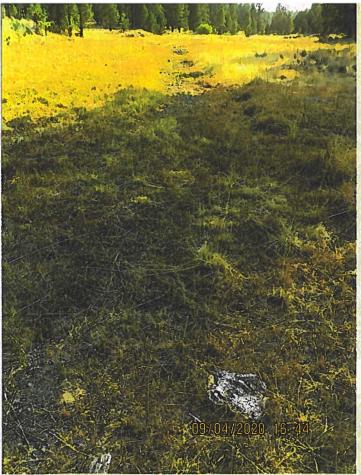
1:31 a host on Columbus Cieck-overgrazed, lacking riparian plants 16:38 a channel to East of 58.70 W/willows Sunflower was allotment 58.70 th RV-Campers. 16:33 & Heavier 3 razing to about 2" stubble in South side of channel 16:31 & higher stubble Nof 150, Sof 100

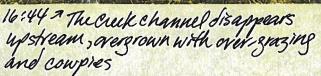




6:39 Two big culverts with splash pools & sediment-view from East 16:41 bank of Willows over merced channels but none infront 6:43 w Same two culverts on west side of 5870-completely dry. 16:42 w Mike in Channel to East of 5870 w/willows x evaded banks

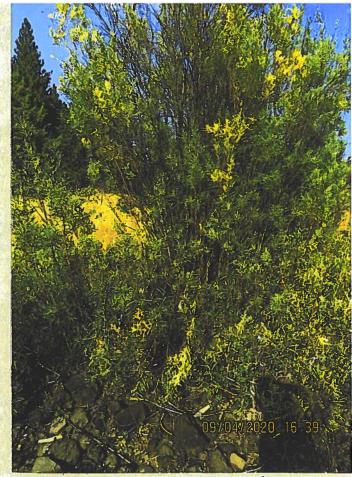






16:43, broad rocky channel upstream (bownstream of view above at 16:44) to west of road 5870 with overgrazing on both, sides





16:39 Tall willow inchannel East of 58%

Sunflower allotment
North of 5870-150, S. of 5870-16
East west of 5870
Paulina Ranger District
Ochoco National Forest

As with other creeks in the Sunflower's Wind Creek allotments, the headwater tributaries of Columbus Creek and Sunflower Creek appear to be drying up due to overgrazing by cattle and loss of most ripartan hardwoods and destabilization of the creek banks. Both creek channels look like they used to be perennial in this area.

DATE 9-5-20

NTL FOREST OCHOCO

DISTRICT AND INA

Grazing Allotment State OC

Pasture WIND CREEK

Location Coordinates N & 5840-700

Surveyors Names'

MIKE & KAREN

09/05/2020 08:58



Recommendation: Fence of a broader area around the livestock pond with a water gap for cattle, if they are reauthorized, and plant riparian hardwoods or cancel the allotment.



Subjective evaluation: The pendeould be restored to serve wildlife because it at least has four aquatic plants and much current wildlife use as a water source. The site could be greatly enhanced by fencing it off to cattle with only a water gap for Tivestock water access and Planting riparian hardwoods. This is very marginal grazing land, so the Forest Service shall consider cancelling this allotment. The well pump is a huge subsidy to permittees for their private profit.

Wildlifense: a Hairywoodpecker heard & seen, a Northern Flicker, a Mallard ducks, coyote tracks, Dragonflies, a possible weasel track, a Kestrel, Damselflies, a possible weasel track, a Golden mantled ground squirrel, Bobcat tracks, a fyzmy muthatch, Kedbreasted nuthatch Mountain blue birds drinking, a fair of small hawks-obviously this is a critical water source for local wildlife.





:05 Trampled banks of the livestock pend with cattle tracks 8:527 Two bulls on the Sammed Tivestock pand berm

1.552 Dog or Conste tracks in the pond mud



Riparian Conditions: a springer well box with an electric pump; a bermed impoundment, springer well fed from uphill; riparian plants: Juck weed, riparian sedge, riparian sedge is in the water-overgrazed and mostly absent outside of the water. Invasive plants: Ventenata grass & Bull Histle.

Livestock damage: trampling, barren ground, postholing, extensive overgrazing, cattle trails, cattle tracks, cattle scat, two bulls present.

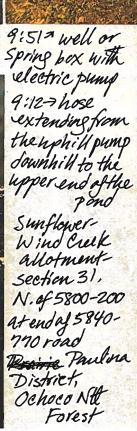
Sunflaver-Wind Creekallotment-North of 5800-200 road, at end of 5840-770 road, Section 31.

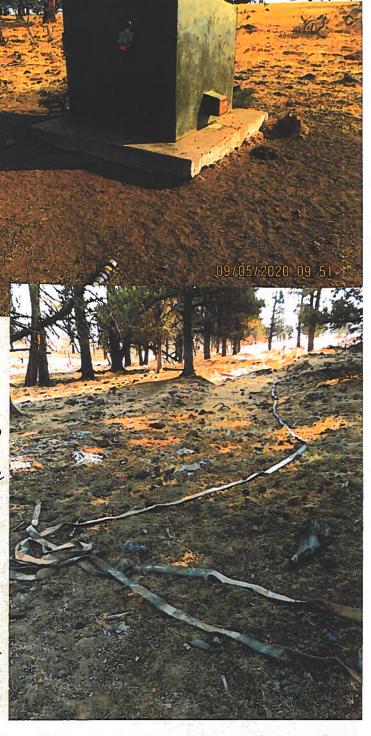
Paulina Langer District
Ochoco National Forest

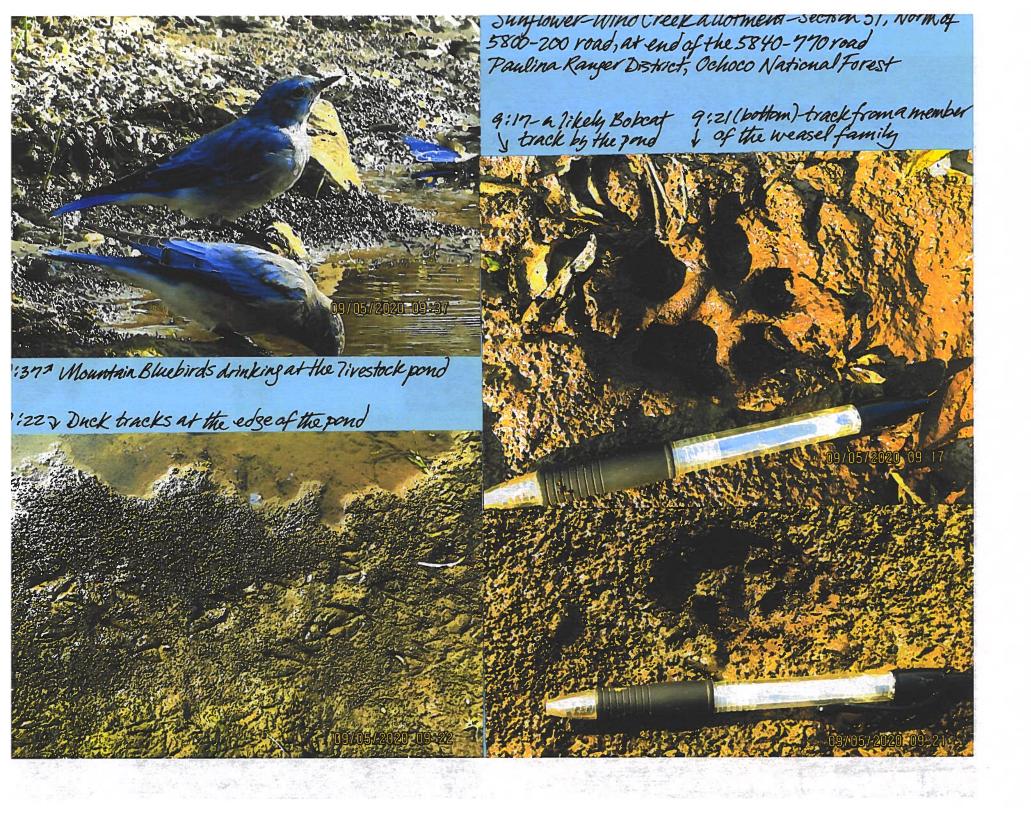


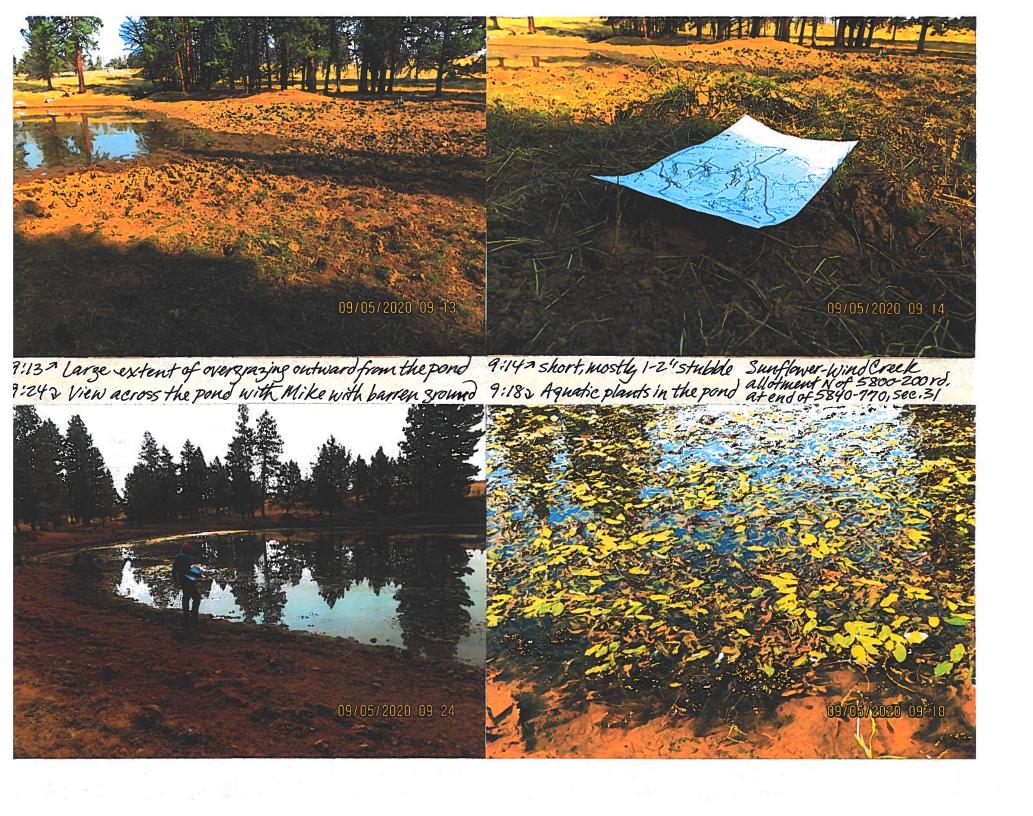
9:13 a greater extent of overgrazing uphill from the pond 9:06 a Goldenmantled ground squirrel near the pond











DATE 9-4-20

NTL FOREST OCHOCO
DISTRICT PAULINA
Grazing Allotment SUNFLOWER
Pasture Courain State
Location Coordinates N AND OF RD 806

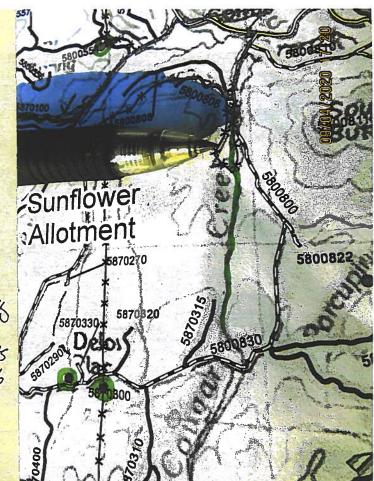
Surveyors Names'
N INS E LACEN

09/04/2020 17:19



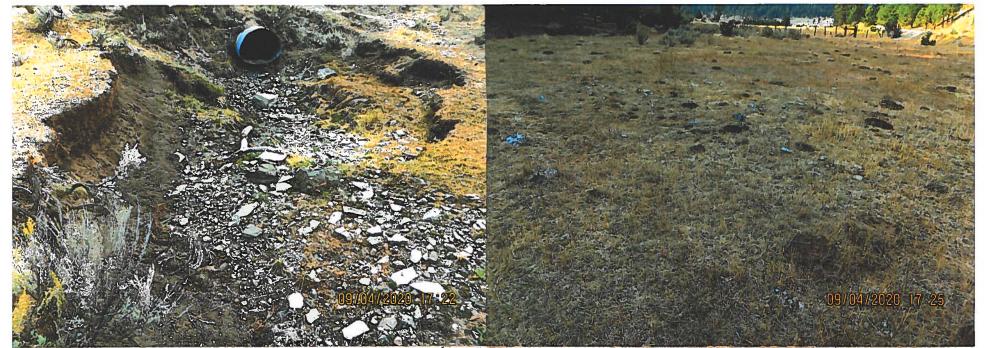
Recommendation: Connect the new fence around Congar Cuek Vorth if rd. 806 to the existing meadow fence. Keep all attle out of all creeks (like Congar Creek) or cancel the ellotment—Don't reauthorize the permit.

Sunflow
Allotme
Overgrazed
Conditions with
Vory short
stubble keights
North of rd. 806



Subjective revaluation: The cattle damage is so extensive as to require well maintained fencing around the entire drainage and riparian hardwood planting wherever hardwoods historically thrived-such as along the creek channel in big meadows like this. Cattle exclusion and hardwood planting are necessary to repair and stabilize the creek banks (as well as to restore the biodiversity of springs and support brodiversity at livestock pands.)

There is extreme riparian damage across these allotments indicative of long-term Forest Service negligence.



17:22 a fish passage barrier (culvert too high)s eroded banks 17:25 a Intense overgrazing with compies North of rd. 806 7:23 a Down cutting of stream Channel Sunflower-Wind Conser Prize Stubble 2" or less with Compies Not Se rd 806, 5 of 58



unflower- Wind Greek allotment - Congar Creek
Jest of 58-800 rd., N & S of rd. 806, S of rd. 58

Panlina Ranger District, Ochoco National Forest

Ciparisan Cenditions and Tivestock damage:

reck banks; banks slumping into the channel extensively, with a seep on the west side of the creek hannel north of road 806. Fine sediment level: bad piles of fine sediment from slumped banks) with vs. depth ratio: varies due to bank slumping but mostly wider than deep; bank stability: very bad (see eroded and slumping banks in photos); neandering channel with small to large cobble with little to no large wood; few willows and mint.

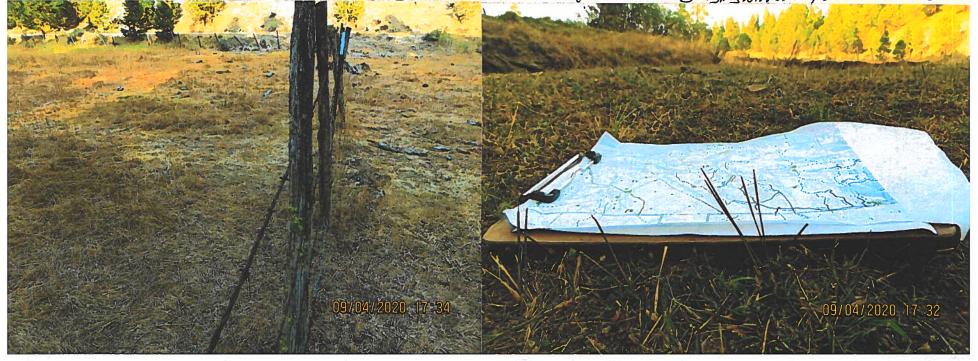


little to no large wood; few winows and min 17:27 Down cut bank, meandering channel a overgrazing 12:26 > Cattle trampled streambed; evoded stream banks, severe overgrazing, bare ground, and Bull thistle (at left)





17:33 Visible fence line difference, but evergrazing on both sides 17:34 less grazed meadow to North Sunflower wind Creek
Congar Creek - w of 58-800, N&S of 806, 3 of 58
Paulina District, Ochoco NF
Congar Cruek allot ment
19:34 V The left side of the fence is the Tess grazed meadow to the North 17:32 V Overgrazing with very short stubble

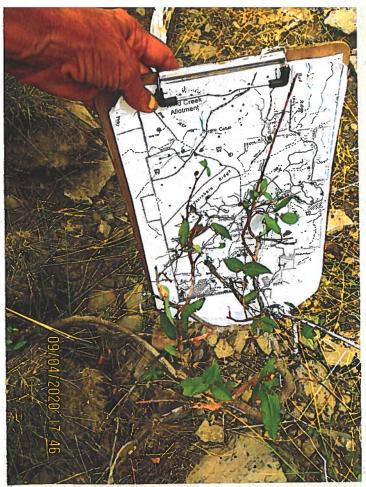


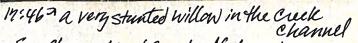


1:412 S. af rd. 806-Extreme overgrazing with clipboardat distance 19:422 culverts overgrazing Congar Cuek-w. of 58-800, S of 58, Sunflower-allotment

1:412 Close up showing very short stubble wind Creek 17:432 rocky meandering channel with overgrazing Ochoco NF



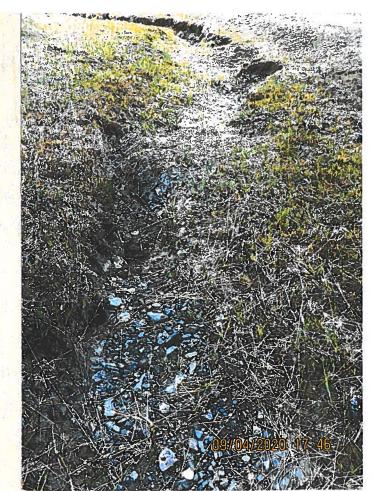




Sunflower-Hind Excel allot ment
Congar Creek-Way 58-800 rd. Paulina District
N+S af rd. 806, S af 58
Ochoco National Forest

17:442 Meandering channel with slumping banks & overgrazing





17:46 slumping bank and overgrown channel

Livestock clamage: Viparian plan

Stubble all along the channel is mostly less than I"—not meeting Forest Plan standard the few willows left are mostly heavily heaged; cattle traits, cattle trail right next to the creek, which appears to be drying up of ne to avergrazing danneating of banks, extensity creek bank slumping into the creek bed, heavy fine sedimen ventenata grass & Bull thistle.

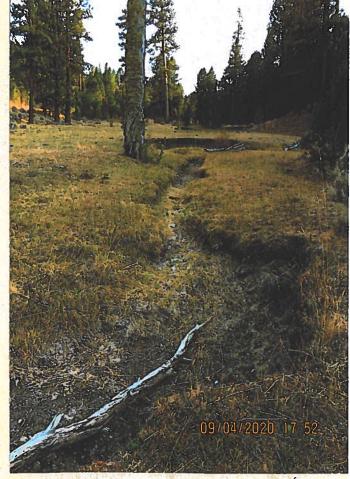


7:47 meandering creek channel with downcrot banks, sediment Toading, overgrown channel 17:49 slumped bank close rew 7:49 s-> meandering channel with slumping banks & excess sediment, short stubble Sunflower wind Creek allotment, Creek





17:53 1 browsed willow, 5 feet high Sunflower allotment-Congar Creek pasture Wastaf 58-800 road, 5 a f 58 rd N&S af rd, 806



17:522 more overgrazing & eraded banks
Paulina Ranger District
Ochoco National Forest

17:492 Creekbankwiths lumping bank leading to overgrown Channel



Wildlife: a Hairy woodpecker Seen, Red tail hawk feathers, wild horse manure, deer tracks, bonglas squirel-Note absence of riparian-associated and agrashes specie losing the creek's bank Stability, water retendion, and riparian plants has led to a lack of riparian-associated wildlife diversity, which is usually about 80% of the ecosystem's biodiver

DATE 9-5-20
NTL FOREST OCHOCO
DISTRICT PAULINA
Grazing Allotment WIND RIVER

Pasture
Location Coordinates B of 5840
GGOOW N. SECTION MAKE
SURVEYORS Names' SW 07 5850-100

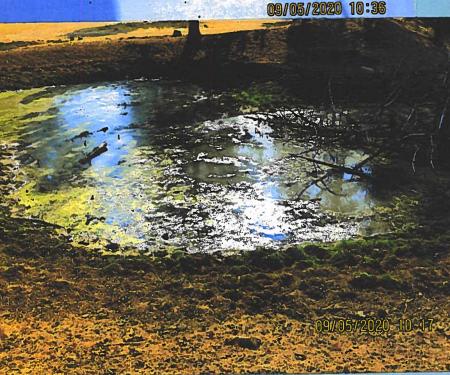
MIKE E KAREN

MONOS 19000 101:288

Recommendation: Yes fence it off and plant hative hardwoods and other native viparian plants. If cattle are re-authorized for this grazing permit (we recommend that the permit be cancelled), the Forest Serire can provide a water gap but keep cattle away from the banks.



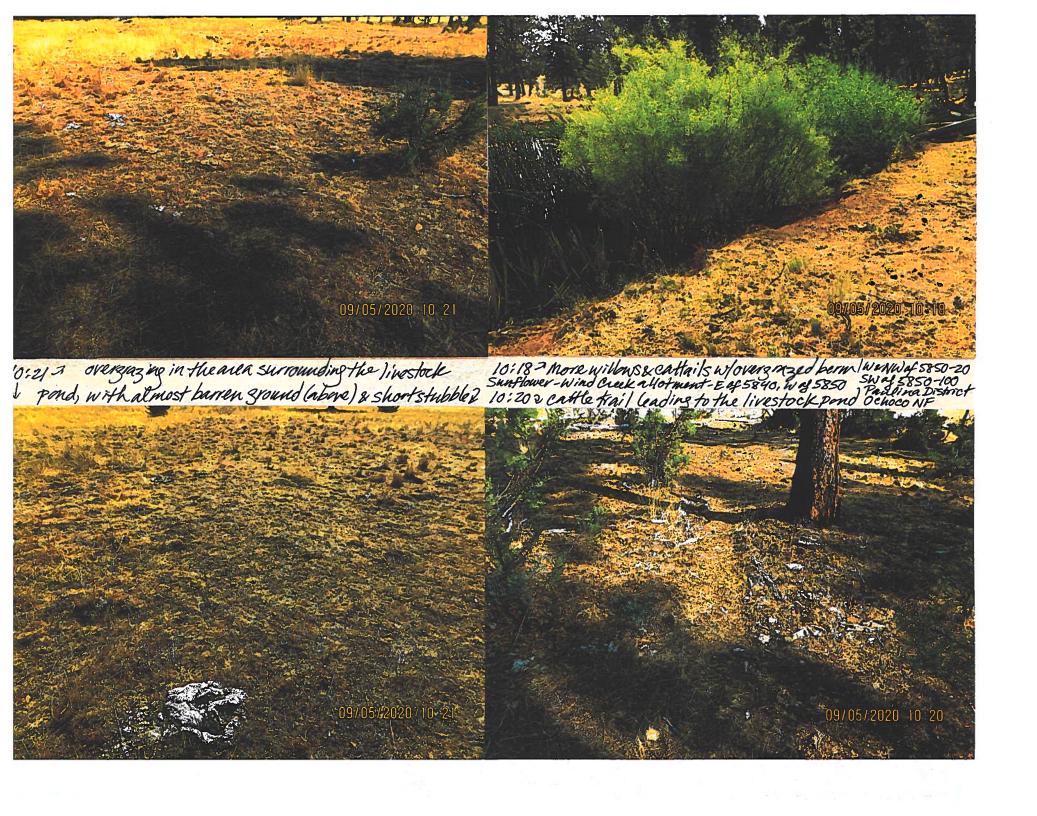
Subjective evaluation: Unfortunately the spring here became a Tivestock pend. So now the Forest Service should try to restore brodiversit, in the area. The Forest Service should Tower and Tenel the top of the berm, plant riparian hardwoods like willows and Red Osier dogwoods and use wildlife-friendly fencing with a water gap for Cattle access or to start active riparian yestoration even in the absence of cattle. The Forest Service could also plant native forbs and native grasses to compete with Ventenata grass in the adjacent meadow.



ivestock damage: and bare ground. Shows some aquatic vergrazing with low plants. No other riparian plants trubble height, down except for will aws and cattails.

No other riparian plants of the perimeter is barren.

Most of the perimeter is barren.



DATE 9-5-20

NTL FORESTOCHOLO

DISTRICT PAULIA

Grazing Allotment WIND CREEK AUGTMEN

Location Coordinates W. of 5850 and FENCELING

N OF 5850-150

SW OF 5850 -400 NW OF 5850 -140 Surveyors Names'
MIKE E KAREN

Recommendation: Completely functo keep cattle out! se wildlife-friendly fencing. If cattleare allowed in the rea, access to water should be only via water sap. lant viparian hardwoods with the whole area fenced ff (not just individual cases) if cattle are allowed.



Subjective evaluation; Very crude impoundment design. (see lower left & following photos.)

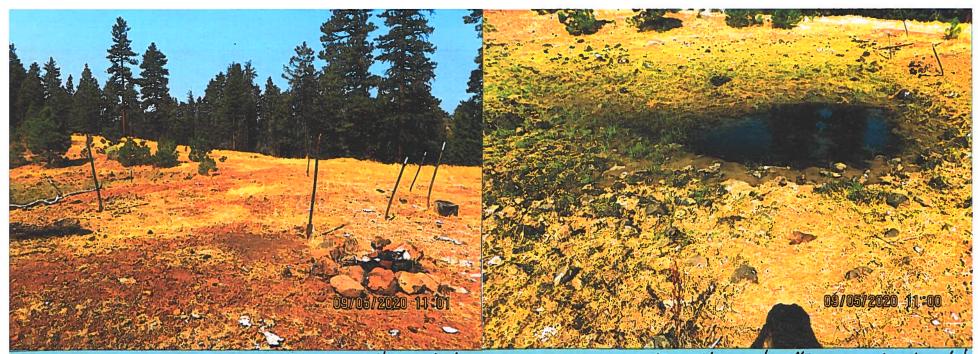
This is how the Forest Service destroys Brodiversity with Tivestock.

11:145 Mating Dragonflies in the only green grassy area left.

10:59 excavated Tivestock pond. Note that the whole area is overgrazed, with cow pies on the bare ground and completely dry "pond" above the seepls pring source







11:01 Fence posts and five ring in avergazed Tivestock
Riparian Conditions:

A seep-like depression in a Targer excavated hole with searce rushes—browsed and trampled. No riparian plants around the water hole. Small willows on the side of the berm, some apparent rushes (see at right in 11:03) Livestock damage: trampling of the riparian area, overgrazing all around, bare ground, compies, few willows in the drier part of excavation (small), very low water Tevel, yellow dock (an exotic invasive plant), now cattle present at the time.

Sunflower-Wind Creek allotment, West of 5850 & fence line, We corner of Section, N. of 5850-150 rd., SW of 5850-400 rd., SW of 5850-140. Paulina Langer District, Ochoco Natsonal Forest

11:00 Remaining water in the pond with overgrazing, trampled.
11:03 & cowpies on the few remaining rushes by the water



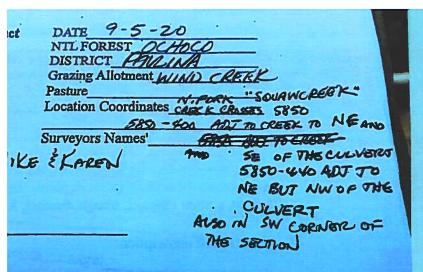


1:06 agarter snake seen hunting in the small water prol 11:12 There were many dragonflies mating in this limited 13 & Dragonflies mating in the 3 mall green aren around the prol moist grassy area



Wildlife sign: Elk-tracks, 12 Spot dragonflies, deer tracks, water spiders (skimmers), & a garter snake

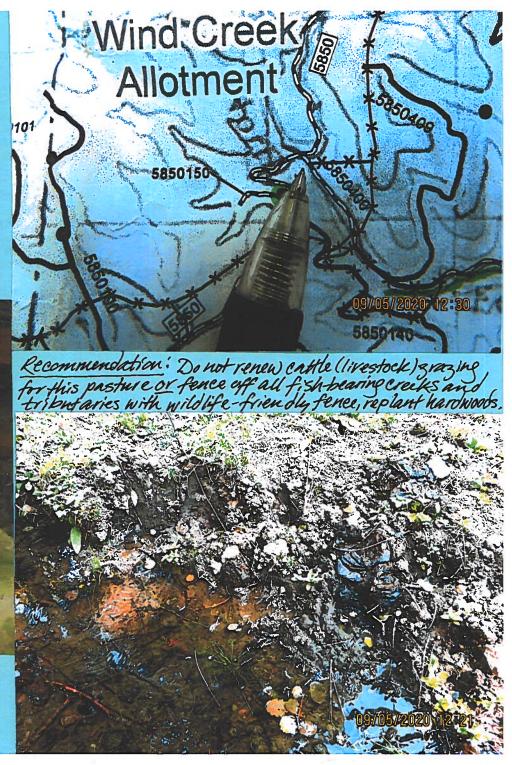
Sunflower-Wind Creek allotment
West of 5850 and fence Vine, SW corner of the section,
North of 5850-150 rd, SW of 5850-400 road, NW of 5850140 road. Paulina Kanger District.
Ochoco National Forest



09/05/2020 12:31



11:49 Garter snake in "Squaw" Creek 12:21 -> Trampling of stream bank with Cowscat and hoof Shearing-eroding streambank into the Stream





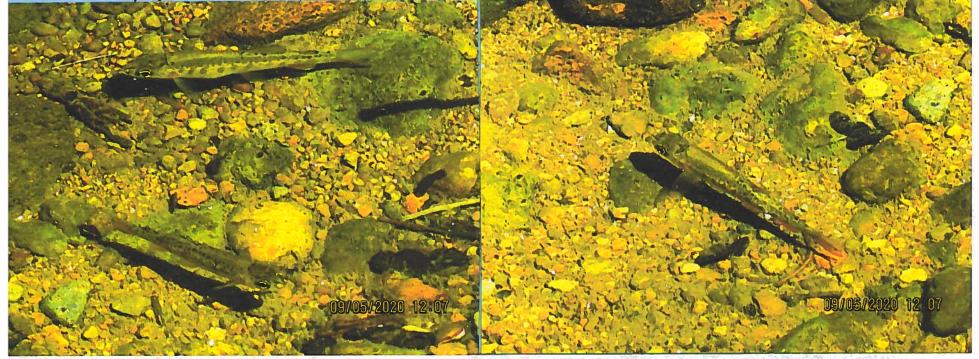
North Fork "Squaw" Creek (which needs to be re-named)
near where it Crosses rd. 5850, 5850-400 adjacent
to the Northeast and Southeast of the culvert, in the
Sw corner of the section
Panlina Ranger District, Ochoco National Forest

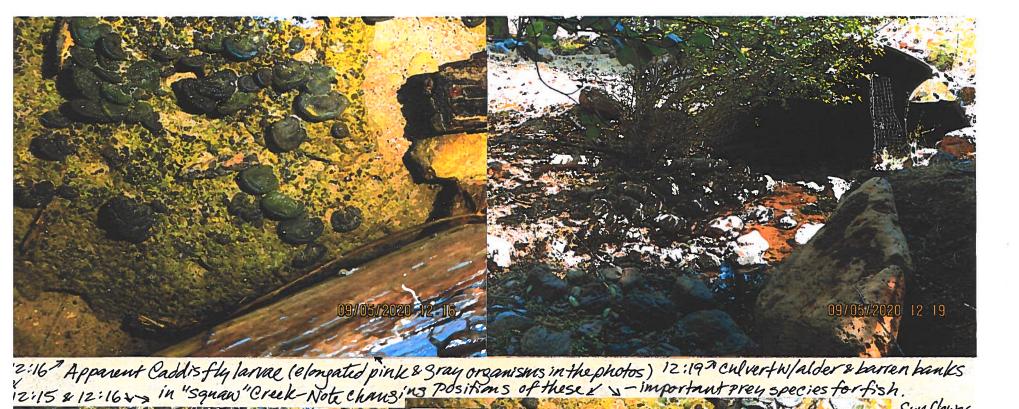
Wildlife: Redbandtrout fry, about a 14 "long garter snake, Caddisfly lange, Dragonflies, & yellow jackets

Subjective Comment:

DRedband trout are a Sensitive species and a Management <u>Indicator</u> species for this Forest and must be protected from eattle!

1:49 another view of the sarter snake in the cuck
2:075 > likely Redband trout fry in "squaw" Creek and views of small to medium cobble in a section with water





Sunflower Wind Creek allotment N. Fork "Squaw" Creek-Crosses 5850 rd. 5850-400 adjacent to creek to NE seafthe cutvert, SW Comer of the section Paulina RD, 09/05/2020 12 15

Ochoeo NHC Forest



2:212 Contletrail and barrenground by creek-overgrazed 12:492 Slumping bank moving into the creek with heavy 2:212 upstream view of creek drying up with no hardwoods Sediment-from intense over-grazing



Subjective evaluation: This would be a Toroly spot if not for the cattle presence. We are concerned that there are Redband trout fry in this creek and no protection from cattle.

Livestock damage: bad width to depth ratio for creek channel, slumping banks, over grazing all around, cowpies in stream, hoof-shearing, barren eroded banks, Tack of riparian plants-no hardwoods except for pool by culvert with isolated alder, Tack of success in re-planting-empty seedling capes, bull thistle infestation by the creek, bare ground, virtually no stubble all around the creek, cattle trails, cattle tracks.

Sunflower-Wind Creek allotwert, Northfork "Squaw" Creek, Creek crosses 5850 rd., 5850-400 adjacent to creek to NE, SW corner of section-Paulina District, Ochoco Ntt Forest