



**Environmental Protection Information Center  
Klamath Forest Alliance  
Project to Reform Public Land Grazing in Northern California  
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**SUBJECT: Forest Service proposal to authorize grazing on the Lake Mountain and Middle-Tompkins portion of the Klamath National Forest and expand authorized grazing into additional headwaters of the Grider Creek Key Watershed: comment on the proposal, draft environmental analysis and related documents**

These comments are authored by Felice Pace, Coordinator of the Project to Reform Public Land Grazing in Northern California (Project); Felice is the primary contact for clarification of these comments. The comments are submitted on behalf of The Environmental Protection Information Center (EPIC), The Klamath Forest Alliance (KFA) and the Project.

### **Summary**

Klamath National Forest Managers propose expanding grazing into a key salmon watershed and refugia and into an inventoried roadless area. In spite of the recent fires and salvage logging which created at least a decade of transitional range outside roadless areas, they propose abandoning the last legal decision which in 1994 focused the Middle Tompkins Grazing Allotment on transitional range and which also protected sensitive wetlands with fencing to exclude livestock use. KNF managers now propose allowing passive season-long grazing focused on riparian areas and wetlands.

The passive season-long grazing system, which in reality is not a grazing system at all but the absence of a system, allows livestock (in this case cattle) to self distribute, no herding is required and typically no herding is done by permit holders using this system. When cattle self distribute they go to preferred locations and remain there for long periods and often the entire grazing system. Under those circumstances, damage to unfenced wetlands, headwater springs and riparian areas is guaranteed as is degradation of water quality.

The managers offer little protection for rare willow wetlands which protect baseflow in streams below and which should provide breeding habitat for Willow Flycatcher, a Forest Plan Management Indicator

Species. Instead of addressing known water quality issues and restoring Willow Flycatcher breeding habitat, the environmental document proposes “adaptive management” as an expedient for delaying dealing with known issues and impacts. The EA proposes substituting “shrub” monitoring for the Willow Flycatcher breeding ground surveys required by the KNF Forest Plan.

The adaptive management and monitoring proposals included in the EA are cynical. KNF managers and grazing staff know full well that they do not have the staffing to complete the monitoring they say they will do or to spend enough time on the allotments during the grazing season to enable effective adaptive management. These managers have no plans to increase grazing program staffing in order to enable effective adaptive management. Therefore, the promise of “adaptive management” is a hollow expedient and not credible.

It is concerning that KNF managers appear to have cherry picked data, omitted data and tailored assessments with the intention of supporting a decision to reauthorize grazing and expand it significantly into a key salmon watershed which has not been grazed for over a decade and which was recently degraded as a result of wildfire, discretionary wildfire suppression, salvage logging and road building.

Because it controversially proposes extending grazing into a roadless area and key watershed that have not been grazed in over a decade and which have been recently significantly degraded as a result of wildfire, wildfire suppression actions, salvage logging and road building, a decision to implement the proposed action requires preparation of an EIS. Because key data was withheld, key analysis was not performed and key stream assessments were done before the recent fires and logging, consultation on impacts to Coho Salmon must be reinitiated. Because it does not comply with KNF Forest Plan requirements, including Willow Flycatcher breeding ground surveys and the Aquatic Conservation Strategy, a decision to implement the proposed action would be arbitrary and capricious.

There is a better way. The recent fires and salvage logging have created at least a decade of transitional range. Focusing grazing on transitional range while protecting willow and other wetlands would lessen grazing impacts and allow streams, water quality and Willow Flycatcher breeding habitat to recover. Especially in consideration of the recent fires, recent logging and cumulative watershed impacts, EPIC, KFA and the Project to Reform Public Land Grazing in Northern California urge and encourage Ranger McArthur to choose the better way.

## **Detailed Comments**

### **1. A new Scoping Notice should be issued:**

In the Draft EA, KNF managers propose expanding the Middle Tompkins Allotment into substantial headwaters of the Grider Creek key salmon watershed, including significant portions of the Grider Creek Roadless Area. The 2013 scoping notice is unclear about the nature of the expansion suggesting that the lands proposed for addition to the Allotment were “historically” part of it. The convoluted grazing history presented in the Draft EA takes that line as well, asserting that a “mapping error” removed the Grider Creek lands from the Middle Tompkins Allotment in 1996 but that the Allotment was subsequently managed as if the Grider Lands were part of the Middle Tompkins Allotment.

The last EA prepared for the Middle Tompkins Grazing Allotment was in 1996. There is no mention in

the 1996 EA or Decision Document indicating that the Grider Creek lands were intended to be part of the Middle Tompkins Allotment as defined at that time. In fact, the EA specifically defines the Allotment as being based on transitory range (clearcuts) in the Tompkins and Middle Creek Drainages. Furthermore, the hand drawn map in the EA excludes the Grider Creek Lands. A scan of the 1996 EA map is appended to these comments. It clearly shows the boundary as on the ridge. Grider Creek lands are not a legal part of the Middle Tompkins Grazing Allotment; the fact that FS managers subsequently treated certain Grider lands as part of the Middle Tompkins Allotment is irrelevant.

While the convoluted grazing history of the area is difficult to follow, a few facts are clear once the last EA and legal decision are read:

1. The Middle Tompkins Grazing Allotment, as currently and legally defined in the 1996 Decision Document, does not include the Grider Creek lands which Forest Service Managers now propose including in the Allotment.
2. The Grider Creek Lands (Tyler Meadows, Faulkenstein, etc.) include inventoried roadless lands.
3. In 1994 the KNF's Forest Plan designated Grider Creek a "key watershed" to be managed as a salmon refugia.
4. The Grider Creek Lands were historically managed both as distinct from and as part of the Middle Tompkins Grazing Allotment. At one time, for example, the Grider Creek lands were part of the Big Ridge Grazing Allotment.
5. The Grider Creek Lands now proposed for addition to the Middle Tompkins Grazing Allotment have not been grazed in over a decade.

No documentation is presented in the EA or appended to it to support the assertion that the 1996 Middle Tompkins Allotment map, including in the last EA and decision, was an "error". In fact, it appears the 1996 decision intentionally exclude key watershed lands from the Middle Tompkins Allotment in order to protect Grider Creek's function as a key watershed and salmon refugia.

The 2013 scoping notice failed to disclose that the proposed Middle Creek Allotment expansion is into a key watershed salmon refugia and roadless area. In order to comply with NEPA, KNF Managers should issue a new scoping notice that notes that FS managers propose expanding the Allotment's legal boundaries into a Forest Plan designated key watershed and into a roadless area. If managers don't want to issue a new scoping notice, they can elect to drop the proposed expansion.

Because so much of the legally defined Middle Tompkins Grazing Allotment burned with substantial portions subsequently salvage logged, there will be ample transitory range in the Middle Tompkins Allotment as currently legally defined for at least a decade. Therefore, there is no need to expand the Allotment in order to provide ample opportunity for grazing. That is especially the case since the current Lake Mountain Allotment permit holder wants to graze the Middle Tompkins area.

A new scoping notice should also note the recent significant degradation of the Grider Creek Key Watershed as a result of wildfire, discretionary fire suppression actions and subsequent logging and road building, including logging geologically unstable lands some of which are forest plan riparian reserves but also including lands which were not designated as "unstable or potentially unstable" even though they decidedly meet "potentially unstable" criteria.

The KNF Forest Plan KNF excluded from riparian reserves all but the "toe zones" of large deep-seated

landslides perched on steep slopes, a common geologic feature in the Klamath Mountains, also known as “earthflows”. The exclusion from riparian reserve status notwithstanding, earthflows are “potentially unstable” and have been subjected to significant impacts since the scoping notice was issued in 2013.

## **2. An EIS should be prepared:**

A new development with potential to introduce 166 head of cattle into a roadless area and key salmon watershed for up to six months, and in particular a proposal to introduce and expand an activity as controversial and damaging to water quality, stream baseflow, wetlands and riparian areas as unmanaged grazing into a roadless area and into a key salmon refugia watershed, is highly controversial. Similarly, the proposal to extend the grazing season for the Lake Mountain Allotment further into the wet season is both controversial and likely to result in significant additional damage to water quality, riparian areas and wetlands. For these and other reasons of substance identified below an EIS must be prepared in order to take the required hard look at the impacts of significantly expanding grazing in both space and time as proposed by KNF managers.

In addition, at least part of the proposed expansion is into lands (Tyler Meadows) that were historically part of the Big Ridge Allotment. Because the Tyler Meadows Trail directly accesses key areas of the Big Ridge Allotment in Packers and Grider Valley and links them to Tyler Meadows and the Faulkenstein proposed allotment expansion area, the two allotments cannot be effectively separated without a fence. But no fence is proposed.

The potential for two-way inter-allotment cattle drift if Middle Tompkins Allotment is expanded as proposed has not been acknowledged or analyzed but is likely. The Big Ridge Allotment permit holder uses Tyler Meadows Trail at times to access the Big Ridge Allotment and could also use that trailhead to put out or remove cattle from Big Ridge Allotment. At minimum KNF managers must disclose the drift issue and assess the likely impacts of cattle drift between the Big Ridge Allotment and an expanded Middle Tompkins Allotment. There is real potential for Tyler Meadows to be grazed by cattle from two allotments and for accelerated degradation to result.

## **3. KNF Managers' alleged “mapping error correction”:**

The Draft EA alleges a “mapping error” was made at the time of the last legal decision to authorize the Middle Tompkins Grazing Allotment in 1996. However, no evidence is presented, quoted or appended to back up that claim. Instead, a fair reading of the 1996 EA and decision, and the hand-drawn map of the Allotment included in the 1996 EA and appended to this comment, indicates that managers intended to base the Middle Tompkins Allotment on transitional range in Middle and Tompkins Creeks, to protect wetlands within the Allotment, including wet meadows, with fencing, and to abolish the Middle Tompkins Grazing Allotment if and when transitional range was no longer available. The exclusion of Grider Creek Lands from the 1996 hand drawn map, the 1996 EA and the 1996 Decision Document strongly suggests an intentional decision to protect and restore the integrity of a key watershed as directed by the 1994 Klamath National Forest Plan’s Aquatic Conservation Strategy.

Absent the presentation and attachment of clear documentation indicating that the 1996 decision intended to extend the allotment boundary into the newly designated key watershed, that decision should not now be interpreted as “an error”. The assertion of a “mapping error” is most likely a post hoc justification for the fact that the 1996 decision was not consulted when grazing was extended into

the Grider Creek Key Watershed in response to requests from the Middle Tompkins Allotment permit holder. The only “error” was extending grazing into Grider Creek without first consulting the 1996 EA and Decision Document.

Whatever the cause, an EA was prepared and a legal decision was made in 1996 which set the legal boundary at the Scott River Ranger District boundary and which did not include lands in the Grider Creek key watershed and roadless area. Whether that was an “error” or “intentional” is legally immaterial; it was a legal decision that set the legal boundaries of the allotment. Changing those boundaries now as proposed would legally expand the Middle Tompkins Allotment into a roadless area and key salmon watershed. That is a major federal action, extremely controversial and therefore an EIS must be prepared if KNF managers insist on the proposed expansion.

I want to urge KNF managers to drop the proposed expansion rather than prepare an EIS. If it makes sense at all to graze the Tyler Meadows and Faulkenstein portions of the Grider Creek key watershed and roadless area, which is doubtful given the land classifications and recent major environmental impacts, that should be considered as part of environmental analysis for the Big Ridge Allotment for which, by court settlement and FS stipulation, environmental analysis must begin before the end of 2016.

#### **4. Need for the Proposal:**

Because the Klamath National Forest currently has 13 “vacant” but fully authorized grazing allotments, including allotments that are near the proposed Lake Mountain and Middle Tompkins Allotments, there is no need for the proposed action in order to “provide opportunities for cattle ranchers to stay in business and prosper measured by economic costs to permittees of not using public land to supplement feed for cattle.” Furthermore, as a result of the 2014 fires and subsequent salvage logging, there are hundreds and perhaps thousands of square miles of transitional range available for grazing within current allotments and via temporary grazing permits, including the entire current Middle Tompkins Allotment as legally defined.

Also KNF managers are under no obligation to provide grazing allotments and expand allotment boundaries in order to accommodate a livestock operator who has not previously grazed the Middle Tompkins Allotment but now wants to expand operations into that area. Accommodating the desires of a single private business is NOT a legitimate “need for action”. It is the capabilities of the land, not the desires of a single livestock operator, which should drive what KNF Managers propose.

#### **5. Issues:**

KNF managers have failed to acknowledge issues which have been raised with them repeatedly by the Project to Reform Public Land Grazing in Northern California (Project), the Quartz Valley Reservation (QVIR) and other entities and which apply to all allotments on the Scott, Salmon, Oak Knoll and Happy Camp Ranger Districts. The managers know these issues are the subject of controversy and debate and that they apply to the allotments currently under analysis. The managers have even failed to identify bacterial pollution as an issue worthy of analysis and they have not disclosed key information on bacterial pollution which is contained within the KNF's own [2013 monitoring report](#) .

Below is a list of management issues applicable to all KNF westside grazing allotments, including the

Lake Mountain and Middle Tompkins Grazing Allotments, which the Project has identified for and to KNF managers and which we have asked the managers to address in all grazing management decisions. The list is from a November 13, 2014 letter to Scott-Salmon District Ranger Ted McArthur who is the decision maker:

- **Persistent over-utilization of available forage.**
- **Failure of AOI's to provide instructions to address over-utilization in the prior grazing season.**
- **A pattern of late removal of permitted livestock has developed and has become normal.**
- **Failure to measure woody utilization and to address problems identified by the Project with over-utilization of willows.**
- **Improper designation of MIM monitoring locations and resulting failure to adequately monitor impacts to riparian areas and wetlands.**
- **Failure to adjust permitted livestock numbers to account for competition with elk for forage and browse. (Elk have recently reoccupied both the proposed Lake Mountain and proposed Middle Tompkins Allotments.)**
- **Failure to adequately assess the ecological condition of rangelands**

I recollect that the Council on Environmental Quality found that issues can emerge at any stage of the NEPA process and, if they are valid and credible, they must be identified and considered. As part of the NEPA process, managers and specialist are expected to bring forward issues of which they are aware. Known issues that are valid, including the management issues listed above and the environmental issues discussed below, should be brought forward and addressed in the environmental analysis.

### **The Willow flycatcher breeding habitat issue**

The Draft EA does identify one “relevant issue”: *“There is a disagreement about livestock grazing impacts on willow flycatchers and their associated habitat in the project area.”* However, the Draft EA mischaracterizes the issue. There is no scientific “disagreement” about the impacts of season-long unmanaged grazing on Willow flycatcher habitat. The scientific literature is clear: if cattle are allowed to select the areas they graze (volitional dispersal) and those areas contain Willow flycatcher breeding habitat, that habitat will be rendered unsuitable for breeding. It is NOT just “browse lines” but rather the fragmentation and degradation of willow stands individually and cumulatively, and including the destruction of Willow flycatcher breeding habitat, which is the issue. The photo below illustrates how severe the fragmentation and degradation of Willow flycatcher breeding habitat can get on KNF Grazing Allotments.



*Severely fragmented and degraded willow wetland, Black Meadows, Big Meadows Grazing Allotment*

The Project has illustrated the destruction of Willow flycatcher habitat as a result of how the Klamath National Forest manages grazing on several allotments; all are documented in our [Allotment Monitoring Reports](#) which have been provided to KNF grazing managers. The Project has not yet, however, had the opportunity to extensively monitor willow stands on these two allotments.

The Wildlife BA discusses the issue. The local district biologist used aerial photographs to evaluate the extent of Willow flycatcher habitat (large willow stands), noting that, while impacts were no doubt occurring based on the scientific literature, it did not appear that the extent of willow habitat on the proposed allotments had diminished.

We are disappointed that the biologist did not inspect the willow stands on these proposed allotments on-the-ground. Without on-site inspection it is impossible to determine how grazing has impacted Willow Flycatcher breeding habitat which is dense brush within 5 feet of the ground in the interior of 6 to 15 foot tall willow stands. The specific large willow stands, which are a rare feature on the proposed grazing allotments, should have been evaluated on the ground.

Now lest we be misinterpreted, we are NOT saying that “browse lines” are unimportant. Mainstream range science has made it clear for decades now that browse lines are an indicator of overgrazing and that overgrazing is associated with damage not only to the rangelands themselves but to riparian areas and water quality when streams and riparian areas are within the willow and alder stands which show browse lines.

**Significant issues that the Draft EA ignores or for which key information was not considered:**

**a. Stream water temperature in salmon, steelhead and trout waters:**

The [Hydrology Specialist Report](#) for this Project includes this statement:

*“Stream temperature monitoring on the KNF from 2010 and 2011 found two watersheds within Middle Tompkins Allotment, Tompkins Creek and Middle Creek, exceeded maximum weekly water temperature during 2010 at 17.50C for Tompkins Creek and 17.30C for Middle Creek. During 2011, Tompkins Creek exceeded maximum weekly water temperature at 16.50C. Stream temperatures warmer than 16.0C are considered over the threshold in beneficial uses for core juvenile salmonids (USFS, 2012). ”*

Yet, in spite of this data being in the hydrology report for the proposed project, and with disregard for the additional impact to streams from recent fires, fire suppression actions and salvage logging, and in spite of this issue having been identified in scoping comments, the stream temperature issue is not identified in the Draft EA. Furthermore, the EA ignores impacts to perennial stream shade from passive season-long grazing (no herding or rotation among pastures) which the Project has documented in 17 [Allotment Monitoring Reports](#) and which have been provided to managers and to the individual who wrote the EA. These omissions should be corrected. The best available information, including Project Allotment Monitoring Reports and relevant research (see scoping input from Western Watersheds, et al.) should be used to assess likely impact of the proposed Project on stream water temperature.

**b. Stream shade:**



The [Hydrology Specialist Report](#) for this Project includes this statement:

*“Stream shade was estimated for perennial streams on Klamath National Forest using the Shade-a-lator model with inputs for vegetation derived from remote sensing data. Air photo interpretation was used to verify the remote sensing data, and to identify reaches where stream shade has been reduced by human activities. The amount of shade loss resulting from human activities was estimated by comparing the modeled shade in altered reaches with nearby stream reaches that Slack human disturbance. A total of 44 out of 87 watersheds on the Forest have human-caused shade loss. Two Creeks within the Middle Tompkins Allotment were measured in 2011 showed an existing percentage of shade in the Tompkins Creek at 90.3% and Middle Creek at 90.5% (USFS, 2011). ”*

The statement ignores the fact that the method the KNF used to assess shade, while it works well for forested lands, is not suited or capable of evaluating shade along streams in meadow ecosystems. The Project has pointed this out to KNF managers but that has been ignored. Furthermore, the KNF has NOT taken the essential step of ground truthing a selection of sites to determine how well the methodology of assessing shade using aerial photos works in the different stream environments present on the KNF. KNF shade data must be considered unreliable until its effectiveness is verified using a random sample of sites along both meadow-lined and forested streams.

The Project's [Allotment Monitoring Reports](#) on 17 Klamath National Forest grazing allotment over the course of seven years contain clear and convincing on-the-ground evidence that shade removal is occurring in key areas on the KNF's westside grazing allotments where poorly managed and essentially unherded cattle remain for long periods.

To comply with NEPA, KNF managers must acknowledge that shade is an issue and must assess how continuing to allow passive season-long grazing (volitional cattle dispersal) on the proposed allotments and at the proposed stocking levels will likely impact stream shade within these two proposed allotments. That assessment should include assessing compliance with shade requirements of the Scott River TMDL Implementation Plan which implements the Clean Water Act on public and private lands within the Scott River Basin.

### **c. Sediment**

The [Hydrology Specialist Report](#) for this Project includes this statement:

*“Between 2009 and 2012 Klamath National Forest measured streambed sediment in low gradient stream channels located near the mouth of 79 watersheds. Reference conditions were developed from 20 reference streams for V\*, percent fine sediment on the riffle-surface, and percent fine sediment in the streambed subsurface. Tompkins Creek within the Middle Tompkins Allotment was measured for V\*. Stream sediment monitoring on the KNF from 2011 found Tompkins Creek (managed stream) demonstrated a sediment indicator that met reference conditions. “However, it suggests that some beneficial uses may be impaired because recorded subsurface sediment size of <6.38mm and <0.85mm were both over reference condition (USFS, 2013).”*

In spite of the fact that the Hydrology Report found that beneficial uses in streams issuing from the proposed allotments were being negatively impacted by excessive sediment, the Draft EA fails to identify sediment production and delivery as an issue. That ignores clear and convincing evidence in 17 Project [Allotment Monitoring Reports](#) that Passive Season-Long Grazing as practiced on the KNF



results in significant streambank trampling and associated sediment delivery to streams, not to mention the extensive literature on the subject presenting in scoping by Western Watersheds, EPIC and KFA.

The Draft EA and the Hydrology Report also ignores additional sediment impacts to streams resulting from the 2014 wildfire, discretionary fire suppression actions and subsequent salvage logging and road construction/reconstruction, including opening and using previously decommissioned roads. These omissions should be remedied. Sediment production and delivery to streams is a significant issue; Sediment impacts should be analyzed using the best available scientific and monitoring information.

#### **d. Bacteria and Nutrient Pollution:**

The [Hydrology Specialist Report](#) for this Project includes this statement:

*“During the summer of 2011, two grazing allotments, Mill Creek and Shackleford, were enrolled in a water quality study by UC Davis Rangeland Watershed Laboratory Department to determine if microbial and nutrient pollution by livestock on public lands degrades water quality such that it threatens human and ecological health. They found that nutrient concentrations throughout the grazing season were at least one order of magnitude below ecological levels of concern. The results were similar to U.S. Environmental Protection Agency’s estimates for background water quality conditions for the region (Roche et al., 2013).*

*Sample sites were selected spatially to allow analysis relative to possible pollution sources in key livestock grazing areas, campgrounds, and recreational areas (swimming holes). In the Mill Creek Allotment, nutrients were found below levels of ecological concern. Average and median fecal indicator bacteria concentrations were below regulatory standards, however, 10% of samples exceeded the REC-1 fecal coliform standard, 6% exceeded the REC-2 fecal coliform standard and 6% exceeded the EPA E. coli standards (Tate, 2011a). In the Shackleford Allotment, nutrients were well below levels of ecological concern, with the exception of a single sample that had elevated total phosphorous. Average and median fecal indicator bacteria concentrations were well below regulatory standards, however, 8% of samples exceeded the REC-1 fecal coliform standard, 2% exceeded the REC-2 fecal coliform standard and 1% exceeded the EPA E. coli standards (Tate, 2011b).”*

The report fails to mention additional relevant studies and data that assess the impact of grazing on fecal bacteria stream pollution. One of those studies is the KNF's own [2013 Bacteria Monitoring in Grazing Allotments](#) report. The KNF’s 2013 bacteria monitoring found no violation of bacteria standards before cattle enter KNF allotments but significant violations of applicable bacteria standards in streams issuing from three grazing allotments once cattle enter them and throughout the grazing season.

A second study which the Draft EA ignores is a summary report on 7 years of bacteria and nutrient monitoring in streams issuing from KNF grazing allotments published by the Quartz Valley Tribe (QVIR). That study was provided to KNF managers by the Tribe and is available on line [at this link](#). The QVIR found violations of applicable EPA and North Coast Water Board water quality standards for temperature and nutrients in streams issuing from three KNF grazing allotments.

The EA must acknowledge the existence of the information noted above that was ignored in the Hydrology Report and subsequently in the Draft EA. The fact that important and relevant information was ignored in the Hydrology Report puts that report's findings and conclusions concerning the impacts

of the proposed Project on stream hydrology and stream bacterial and nutrient pollution into question. Due to the above noted errors and omissions, the Hydrology Report cannot serve as a basis for conclusions in the EA concerning the proposed Project's likely impacts to stream shade, bacterial and nutrient pollution.

**e. Competition between cattle and expanding elk for available forage:**

Since the last environmental analysis in 1996 native elk have expanded their range on the KNF and have occupied the proposed allotments after a long absence. Elk are primarily grazers and they compete with cattle for available forage. The Draft EA fails to acknowledge competition for forage by permitted cattle with expanding elk herds. It and related specialist reports fail to consider that competition when calculating “stocking rates” for these allotments, that is, the number of cattle which will be permitted to graze each allotment. The failure to calculate total available forage, forage likely to be consumed by elk and other wildlife and cattle, and which adjusts permitted cattle stocking accordingly violates NFMA and NEPA, and likely also violates the Clean Water Act (CWA) because the competition for forage will drive cattle to graze more in riparian areas and wetlands.

**6. Current Ecological Condition and Desired Future Condition:**

Klamath National Forest Plan Standards and Guidelines that apply to grazing include S&G 23-10: *“The desired future condition of rangeland resources should be expressed in terms of desired ecological status (FSM 2090.11).”*

The EA’s section on “Rangeland Resources” begins with this statement:

*“The method used to determine effects on rangeland resources was a **qualitative** comparison of each alternative’s likelihood of meeting the Forest Plan’s desired condition to the existing conditions.”* (emphasis added)

In other words, the range specialist used professional judgment to determine current condition and impacts, including “the ecological condition and trend for grazed riparian areas and rangelands. But grazing specialists are not qualified to evaluate whether or not riparian areas are in properly functioning condition especially if that evaluation is done “qualitatively” rather than being based on data on actual conditions. If the current condition of riparian areas is going to be evaluated “qualitatively”, rather than using data and analysis, the riparian areas should be evaluated by a biologist qualified to perform the evaluations.

Just as it fails to adequately assess current riparian condition and trend, the EA also fails to define the desired future condition for the allotment as a whole or even for the meadow ecosystems on which it asserts that grazing will be based and focused. Instead the EA in its body and in its response to scoping comments refers to desired future conditions defined in the “LRMP”, that is, in the KNF’s Forest Plan. That is not enough. The EA needs to call out the desired conditions for environments that grazing is known to impact and use analysis to determine how the proposed grazing season, number of cattle (“stocking”) and grazing method (passive season-long grazing) will likely impact those desired future conditions. What, for example, is the desired condition for large willow wetlands; how does that desired condition compare to current conditions and how will the grazing alternatives under consideration likely impact that condition?

## 7. Alternatives:

- **An adequate range of alternatives, and specific feasible alternatives, were not analyzed as required by NEPA:**

The EA description of the Middle Tompkins Grazing Allotment includes this statement:

*“To alleviate grazing pressure on the adjacent allotments, the Tyler Meadow Allotment was managed as part of the adjacent Big Ridge allotment from 1946 through 1973.”*

The connection between the Big Ridge Allotment and the proposed expansion of the Middle Tompkins Allotment continues to this day and is facilitated by recent reconstruction of the Tyler Meadows Trail. It is reasonable to expect that Big Ridge cattle, which are not herded during the grazing season but rather are distributed on the allotment largely as a result of volitional choices the cattle themselves make, will use Tyler Meadows and other portions of the Grider Creek lands that FS managers have proposed for addition to the Middle Tompkins Grazing Allotment. Because they know about the historic and current connection between the Grider Creek lands and the Big Ridge Allotment, KNF managers should have considered an alternative which excludes Tyler Meadows and all lands in the Grider Creek key watershed from the Middle Tompkins Allotment.

- **Klamath National Forest Managers have failed to consider reasonable alternatives suggested by the Project for all westside KNF Grazing Allotments and by KFA, EPIC and others during scoping.**

KNF managers have failed to display and consider an alternative which requires the grazing permit holder to implement a specific rest rotation grazing regime. Requiring rest rotation grazing is highly likely to reduce grazing impacts, including impacts to water quality which violate water quality standards for bacteria and nutrients and hydromodification of headwater basins. The failure of KNF managers to consider an alternative which mandates rest rotation grazing management ignores new information on the impact of passive, season-long grazing, including information on those impacts in Project Monitoring Reports and the recent report of renowned hydrologist Jonathan Rhodes. The exclusion is arbitrary, capricious, an abuse of discretion and a NEPA violation.

- **Klamath National Forest Managers have failed to consider an alternative that, like the 1996 decision, is based on the abundant transitional range that will certainly be present within the allotment over the next ten to fifteen years.**

The 2014 fire and subsequent salvage logging will result in abundant transitional range resources within the legal boundaries of the Middle Tompkins Grazing Allotment. KNF managers should develop, display and adopt an alternative that targets grazing on the abundant transitional range during the ten year life of the grazing permit for the allotment. Sensitive wetlands which are rare in this landscape, and especially willow wetlands, should be fenced to exclude cattle and allow recovery, including recovery of Willow Flycatcher breeding habitat which is dense brush within 5 feet of the ground in the interior of large willow stands.

If KNF managers choose to continue grazing in sensitive wetlands and riparian areas rather than focusing grazing on transitional range, they should develop, display and adopt an alternative which prohibits passive, season-long grazing and requires implementation of modern rest rotation grazing

which uses regular herding at specified intervals to rotate grazing among the various and distinct pastures of the Lake Mountain and Middle Tompkins Grazing Allotments.

## **8. The Proposed Action:**

### **a. Willow Flycatcher Breeding Habitat:**

KNF managers assert that “Alternative 2 responds to the Willow flycatcher issue by adding willow-alder habitat monitoring and providing adaptive management options if “shrub” condition is declining. There are several problems with this response:

1. The proposal is not actually to monitor Willow Flycatcher habitat which is the interior of large willow stands with dense interiors but rather to monitor “willow/alder habitat”. That is convenient since alder habitat is not nearly as sensitive to bovine mechanical damage as compared to willow habitat and could be termed resistant to the typical damage that renders willow stands unsuitable for Willow Flycatcher breeding. The proposed monitoring does not respond to the issue and would be done by the very range specialists who manage the allotment under direction of the District Ranger and who deal face-to-face with permit holders.

If habitat monitoring is adopted to address the Willow Flycatcher breeding habitat issue, that monitoring must focus specifically on Willow Flycatcher breeding habitat which is in the interior of large willow stands. It must also be implemented by an individual with the expertise and experience needed to identify and assess the quality of Willow flycatcher breeding habitat. Range specialists and range technicians do not have the required expertise and they cannot adequately do the job unless they receive specific training and certification from qualified individuals.

2. The proposal cynically does not include Willow flycatcher breeding ground surveys. Those surveys are a Forest Plan monitoring requirement because Willow Flycatcher is a Forest Plan Management Indicator Species. However, since Forest Plan adoption in 1994 the KNF has never completed breeding ground Willow Flycatcher surveys to protocol on a Grazing Allotment.

### **b. Adaptive Management:**

While claiming it will do Adaptive Management, the proposed action studiously avoids the kind of monitoring data needed to inform Adaptive Management, including data from Willow Flycatcher breeding ground surveys performed in accordance with protocols. Absent the needed monitoring information, Adaptive Management is little more than an excuse to defer addressing impacts and issues when they should be addressed, that is, now when an assessment is underway and there is a decision to be made.

There are other problems with Adaptive Management as described in the Proposed Action:

1. The Project has extensively [documented and reported](#) to Klamath National Forest managers the fact that the KNF’s grazing program cannot implement Adaptive Management effectively because managers have not staffed the program sufficiently to allow time for range specialists or other personnel to actually patrol the grazing areas during the grazing season so that they know what management changes, if any, are needed. Close examination of current grazing allotment management

on the Klamath National Forest confirms what the project has documented and reported. Because grazing specialists doesn't know what is going on the allotments during the grazing season, they cannot implement in-season adaptive management. Furthermore, Adaptive Management across grazing seasons is ineffective and minimal because most of grazing staff members are seasonal rather than year around employees.

2. KNF mangers have not had, do not now have and have no plans to request the staffing needed to complete the riparian and woody utilization monitoring which the EA claims will take place on these allotments. The clear indication that staffing is not sufficient to complete the proposed monitoring is current performance: KNF grazing managers assert on paper that they measure riparian and woody utilization, but inspection of monitoring data reveals that rarely happens in fact. Furthermore, KNF managers have not taken steps needed, for example made budget or staffing requests, to staff up for that purpose. In addition, the KNF's MIM riparian monitoring is not part of a monitoring design is not systematic and does not follow the MIM protocol. For these reason, only a small part of the monitoring proposed in the Draft EA will actually take place; without monitoring data adaptation will not happen at all or will not be effective.

3. KNF managers currently have the ability to implement Adaptive Management on all KNF grazing allotments via the Annual Operating Instructions (AOIs) which the Forest Service has represented to the State of California as a Best Management Practice (BMP). But contemporary grazing management history on the Scott-Salmon Ranger District demonstrates that KNF managers do not use their own monitoring information to adjust grazing practices in an adaptive manner. For example, the KNF's [2013 Bacteria Monitoring in Grazing Allotments](#) document reports that bacterial water quality standards were not violated before grazing and in nearby streams where recreation is present but livestock grazing is absent. However, once cattle were on the allotments bacterial pollution spiked to levels and for periods of time that violate the standard. In spite of having that information for at least two years, and in spite of a dozen or so Allotment Monitoring Reports provided to FS managers by the Project which provide photo documentation of the grazing practices and impacts that result in that pollution, KNF managers have taken no steps to change or adjust practices in order to reduce bacterial pollution, that is, to end the violations.



*Unherded cattle spend large amounts of time in and next to waterways. They deposit waste directly or indirectly into water bodies. This example is from East Boulder Basin where bacteria and nutrient water quality standards have been violated.*

What is described above is emblematic of KNF Grazing management. Inspection of a decade of Annual

Operating Instructions (AOIs) for all westside Klamath National Forest grazing allotments illustrates that, even when KNF managers have data indicating that change is needed, management changes to address the impacts and violations do not take place.

For the most part KNF AOIs only order a change in permit holder allotment management when utilization standards indicate over-utilization of forage in locations outside riparian areas and wetlands. But even with non-riparian utilization, AOI's often fail to instruct the permit holder to rest the pasture that was over-utilized the prior year. AOI's which fail to provide instructions designed to address over-utilization of forage include the Big Ridge Allotment AOIs for the following years:

- **2005: Utilization in Upper Kelsey was at or over the 60% limit in each of the four prior years.**
- **2004: Utilization in Upper Kelsey was 70% in 2003; utilization in Bear Valley was 65% in 2003; utilization in Packers Valley in 2003 was 63%.**
- **1996: Utilization in 1995 in Bear Valley was 80%, Stones Valley was 66%, Bear Valley was 60%, Kelsey was 59% and Turk Lake was 80%...all above "allowable use". However, the 1996 AOIs did not include instructions to rest or go light on any area.**
- **1994: Utilization in Stones Valley in 1993 was 66% (55% allowed) and in Bear Valley was 60% (55% allowed) but there were no instructions to rest or even to go light on grazing in these areas in 1994.**

For the above stated reasons, the claim that grazing management on the proposed allotments will be changed in an adaptive manner if management problems surface via monitoring is empty rhetoric not supported or indicated by current and past behavior and not possible with current staffing levels.

KNF managers should either staff up so that they have adequate Adaptive Management and related grazing monitoring and management capabilities or they should drop the pretext that they will do what, in fact, the managers have no capability to do and, based on past performance, they have no intention of actually doing.

Rather than attempting to use Adaptive Management rhetoric to avoid and defer addressing the Willow flycatcher, bacteria pollution, shade, stream temperature and other issues which have been identified above, managers should use the best available information to address those issues now. A good way to address the issues would be to require modern rest rotation grazing for the Lake Mountain and Middle Tompkins Grazing Allotments.

## **9. Legal Compliance:**

In order to comply with NEPA, KNF managers must assess current conditions and, using the best available scientific information and monitoring data, perform analysis which takes a "hard look" at how the proposed decision and alternatives would likely impact those conditions. That must include the significant issues identified above, including stream water temperature, stream shade, sediment production and delivery, bacteria and nutrient pollution and Willow Flycatcher breeding habitat.

For example, the EA must assess the current condition of Willow Flycatcher breeding habitat on the proposed Lake Mountain and Middle Tompkins grazing allotments and disclose that condition in the EA. Analysis must also consider the best available science on the impacts of grazing on Willow Flycatcher breeding habitat. That is particularly the case because Willow Flycatcher is a Klamath

National Forest Management Indicator Species (MIS) and listed as endangered pursuant to the California ESA. The results of the analysis must be displayed and, if impacts are or could be significant, measures must be identified which are capable of mitigating significant impacts.

The deferral of analysis and disclosure of impacts by asserting that Adaptive Management will take care of significant problems which arise in the future does not comply with NEPA. On the contrary, the whole point of NEPA is to use the best available information and robust analysis to anticipate likely impacts so that the decision and action can be tailored to avoid, minimize or mitigate those impacts.

KNF managers propose to substantially expand the period during which grazing can be permitted from the current period which, for the Lake Mountain Allotment is July 15<sup>th</sup> until October 15<sup>th</sup>. The proposed Lake Mountain Allotment grazing period would be extended to October 30<sup>th</sup>. That would significantly increase the likelihood grazing would do watershed damage because willows are preferred by cattle in fall after first frosts and because on the KNF October grazing is especially concentrated in riparian areas. Furthermore, extending the grazing period to October 30<sup>th</sup> would increase the likelihood that grazing would occur in riparian areas and wetlands during extremely wet conditions.

The proposed Middle Tompkins Allotment grazing period would be a full six months. That would also increase water quality, riparian and wetland impacts especially because cattle would be allowed to remain in preferred riparian and wetland locations for such a long period without herding.

Late October cattle removal would in most years do damage to already muddy trails. The KNF, including the Scott-Salmon District, does not have sufficient funding to adequately maintain the trails used to take cattle to allotments and to remove them. Adding additional trail damage by extending the grazing season is not a good idea; those additional impacts are likely to be significant but they are not acknowledged or assessed in the Draft EA.

The proposal to significantly expand the period when an activity as controversial as grazing, and which the FS own monitoring indicates violates applicable water quality standards for bacteria, is arbitrary, capricious and an abuse of discretion. Furthermore, an expanded grazing period is proposed without FS managers having adequately considered competition for forage by permitted cattle with expanding elk herds. Absent a recalculation of “stocking rates” for these allotments which calculate total available forage, forage likely to be consumed by elk and other wildlife and which adjusts permitted cattle stocking accordingly violates NFMA and NEPA, and likely also violates the Clean Water Act (CWA) because the competition for forage will drive cattle to graze more in riparian areas and wetlands.

## **10. Proper Functioning Condition (PFC), Coho Salmon Habitat and Consultation**

According to the Fisheries BA/BE:

*“Evaluations were completed during 2013 on Kuntz Creek headwaters within the Lake Mountain Allotment and on Townsend Meadow, Tyler Meadow, and Faulkstein (sic) Meadow within the Middle Tompkins Allotment.”*

This indicates serious problems:

The evaluations were completed in 2013 but in 2014 lands within the proposed allotments were subjected to extensive wildfire and massive discretionary suppression actions. Subsequently streams in



and issuing from the project area have been impacted by salvage logging and accompanying temporary road construction and reconstruction. Fire, suppression actions, salvage logging and road construction/reconstruction are known to affect PFC. Road reconstruction has included reopening roads that were previously decommissioned because they posed significant threats to water quality and ESA listed Coho Salmon. To serve as a valid basis for the Draft EA and for consultation with NMFS on impacts to Coho Salmon, PFC evaluations must be conducted post 2014. These evaluations should be completed after the current round of logging and road building has weathered a winter.

In addition:

- Kuntz Creek is a key area for the Lake Mountain Allotment for which PFC was determined. However, as confirmed in AOIs, Lookout Springs is also a key area. Utilization data for the past five years presented in the 2016 AOI confirms that Lookout Springs currently receives more cattle use than Kuntz Creek headwaters. Therefore, Lookout Springs should have received a PFC evaluation. The fact that it did not also renders conclusions based on PFC evaluations incomplete at best.
- Tyler Meadow, and Faulkenstein Meadow received PFC evaluations. However, they are within the proposed addition to the Middle Tompkins Allotment, i.e. the former of Tyler Meadows Allotment, which has been “vacant” for over a decade. Therefore, PFC evaluations there can only be used to conclude that native ungulates are not rendering the streams non-properly functioning and are not useful in evaluating potential grazing impacts on PFC. The BA/BE failed to evaluate properly functioning condition for the Middle Creek Meadows key area of the existing Middle Tompkins Allotment as legally defined and bounded.

In the case of both existing allotments, the key areas which are most impacted by cattle grazing did not receive Properly Functioning Condition (PFC) evaluations. Furthermore, all PFC evaluations were done before significant recent impacts to these streams and watersheds from fire, fire suppression actions, logging, road construction and reopening decommissioned roads.

The existing Allotment Management Plan (AMP) for the Lake Mountain Allotment lists “Big Meadow and Back Meadows” as the “key areas” for the Allotment. Those areas, however, are key areas on the Big Meadows Allotment. The error is revealing: KNF managers cut and paste the same provisions into all AMPs when, by FS management direction, AMPs should be tailored to conditions on each particular allotment. Cut and paste boilerplate coupled with a minimum of allotment specific requirements and instructions is also evident in KNF Annual Operating Instructions (AOIs) and is indicative of the neglect which characterizes how KNF officials manage grazing.

The omissions detailed above render the Fisheries BA/BE incomplete and inaccurate and for those reasons it cannot provide an adequate basis for either the EA or for a Letter of Concurrence from NMFS. In order to comply with applicable law and regulations, KNF managers must reinitiate consultation, correct the BA and secure a new concurrence letter from NMFS based on a complete and adequate BA/BE.

## **11. Monitoring**

The proposed “Monitoring Strategy” is inadequate and not capable of accurately and adequately

assessing impacts to water quality, streambanks, riparian areas, shade and wetlands.

Relevant scientific literature makes it quite clear that forage “utilization monitoring” as implemented on the KNF, that is, in locations that are not riparian areas or wetlands, is NOT capable of assessing or indicating riparian, wetland and water quality impacts. KNF allotment monitoring should thus include or substitute and prioritize woody utilization monitoring within riparian areas and riparian forage utilization.

Monitoring the implementation and effectiveness of relevant BMPs is capable of indicating riparian and wetland conditions including compliance with relevant plans, laws and regulations including the CWA. However, monitoring sites must be selected at random for BMP monitoring to yield reliable results.

A few years ago, the KNF ceased random selection of grazing sites for assessing the implementation and effectiveness of grazing-related BMPs. The change from random selection of grazing BMP monitoring sites to volitional selection of grazing BMP monitoring sites by grazing specialists corresponds to a significant improvement in grazing BMP implementation and effectiveness performance on the KNF; grazing BMPs had previously lagged significantly in both implementation and effectiveness as compared to all KNF BMPs.

In order to produce valid and reliable results, and to comply with the Management Area Agreement with the SWRCB which implements the CWA on California national forests, KNF managers must randomly select grazing BMP monitoring locations. Until random site selection is restored, KNF grazing BMP evaluations will not be valid and cannot be relied upon to assess the impacts of grazing.

The Project has extensively documented the many problems with Multiple Indicator Monitoring (MIM) as practiced on the KNF in several of our reports all of which have been provided to KNF managers, including the range specialist writing this EA and the decision maker, Ranger McArthur. That information is incorporated into these comments by reference. To summarize KNF's use of MIM has the following fundamental problems:

- KNF managers fail to follow the MIM protocol. For example, the MIM protocol requires at least one monitoring location in each watershed that is located in the riparian location likely to be most impacted by cattle grazing. But KNF managers only establish one MIM location per allotment.
- The Project has documented the fact that MIM monitoring locations have been selected based on their nearness to a trailhead or a road. Locations have also been selected which are least likely to be impacted by grazing, instead of those that are clearly likely to be most impacted. The MIM protocol clearly directs that MIM sites should be located where impacts from grazing are most likely to occur.
- There are also indications that range specialist select MIM sites and other alleged multi-disciplinary team members sign off on these selections without reviewing them in the field.

The failure to follow MIM protocol has been documented by the Project but also by the National Riparian Service Team in their report to KNF managers on field review of the MIM site selected for the

Big Meadows Allotment. That NRST Report is incorporated into these comments by reference.

The Project has made numerous requests to KNF managers, including requests to Ted McArthur, decision maker for the proposed Lake Mountain and Middle Tompkins Grazing Allotments, to “review MIM sites on the allotments for which you are responsible to determine if they were properly and independently established. Please determine if these MIM locations have been placed in the preferred locations which cattle use regularly or if they have been placed - as is the case in Black Meadows - in locations which are not used often or regularly. If you find that the latter is the case, as suggested by the Black Meadows MIM placement, please fix the problem.”

## **12. Impacts:**

As noted above and extensively documented by the Project, “past monitoring results” are lacking or meager for riparian areas and questionable when it comes to recent BMP and MIM monitoring. For those reasons past monitoring results are inadequate or unreliable as a basis for analysis of future impacts. Under these circumstances, NEPA required KNF managers to use the best available scientific information. That includes the Projects [Allotment Monitoring Reports](#) and our professional hydrologist’s report, all of which have been provided to KNF officials, including the decision maker for this Draft EA and the person who wrote it. The referenced reports are included in this comment by reference.

In addition, KNF managers have not assessed the “ecological condition and trend for grazed riparian areas and rangelands” either on this allotment or on other KNF allotments. If the KNF has specific assessments for these lands and allotments and for any grazed area in the Grider Creek key watershed in particular, which meet the criteria they should list them in the EA and provide the methods used and qualifications of the personnel performing those assessments. They should also provide links to those assessments on the web page for the Project.

Absent relevant and robust ecological assessments of the riparian areas that will be impacted, KNF officials must use the best available scientific information to assess likely impacts. The draft EA is deficient in that regard. In fact, the EA ignores modern grazing research and methods and instead proposes to continue practices which have been discredited by range science and have also consistently been found to result in degradation of water quality, riparian areas and wetlands both on KNF lands and across the West.

The Methods section states that “For cumulative effects analysis the entire project area was used.” That is an error that should be corrected. To be meaningful, cumulative watershed impacts must be assessed at the watershed scale not along an arbitrary and discretionary project boundary. Cumulative impacts to the Grider Creek Key Watershed, the Scott River and the Klamath River include but are not limited to: the 2014 wildfires, 2014 discretionary fire suppression actions, the Westside Project, the Lover’s Bar Project, Big Ridge Allotment grazing and the proposed expansion of the Middle Tompkins Allotment into the Grider Creek Key Watershed. The cumulative impacts of all these and any other relevant actions and impacts must be analyzed and disclosed at the watershed scale whether or not those impacts originate within the proposed Project’s boundaries

### **a. Hydromodification**

The EA should consider information that is now available on the impacts of grazing as managed on the KNF on headwater basin meadow hydrology and stream baseflow. That new information is the report of hydrologist Jonathan Rhodes on the Big Meadows Grazing Allotment. The report is available for viewing and downloading via DropBox at this link:

[https://www.dropbox.com/s/j3heofz33bboh9n/RhodesRpt\\_KNF-BMA\\_2-18-16.pdf?dl=0](https://www.dropbox.com/s/j3heofz33bboh9n/RhodesRpt_KNF-BMA_2-18-16.pdf?dl=0).

The Draft EA does not adequately analyze and disclose likely impacts of the Proposed Action on headwater and meadow hydrology and on base flows in the streams which issue from the grazed headwater, including impacts to stream baseflow and hydrology of the Grider Creek Key Watershed. That should be corrected in any subsequent environmental document. The Rhodes report suggests impacts to hydrology are likely significant. Those impacts likely significantly affect ESA listed Coho Salmon. Therefore an EIS should be prepared and a new consultation on impacts to Coho Salmon should be initiated which includes the new information on hydrologic impacts.

The US EPA recently issued a new report on hydromodification and its assessment. Those preparing the EA should consult that new information from the expert agency as well.

#### **b. Bacterial pollution and related health risks:**

The KNF's own bacteria monitoring available for download [at this link](#) clearly demonstrates that the manner in which grazing is managed on the KNF is likely to result in violation of applicable bacterial pollution standards. Yet the KNF is proposing to manage the Lake Mountain and Middle Tompkins Grazing Allotments in the exact same manner that we now know is likely to result in violation of water quality standards, that is, the Clean Water Act. While KNF managers promise they will do "Adaptive Management" they neither have the staff nor the track record to back up the assertion. Furthermore, the bacteria results suggest that adaptive management is already needed but KNF managers have made no move to change management on the Mill, Shackleford or Big Meadows Allotments where those violations are ongoing. That suggests "adaptive management" as practiced by the KNF grazing program is not effective and cannot be relied on to justify a decision.

The failure of FS managers to change the manner in which they manage the Shackleford, Big Meadows and Mill Creek Allotments in response to the 2013 and prior bacteria pollution violations suggests that they will behave in the same manner with respect to the Lake and Middle Tompkins Allotments. As pointed out above, the KNF's grazing program staffing level is incompatible with effective Adaptive Management.

In order to comply with NEPA, the CWA and NFMA, KNF managers must disclose the likely violation of established bacterial standards that will likely result if passive, season long grazing, in which cattle distribute themselves and are rarely if ever moved to alternate, less-utilized locations, is allowed to continue. Managers must also propose management requirements and methods that, based on scientific grazing studies, are likely to change that outcome, i.e. which are not likely to result in violation of water quality standards.

The best way to reduce and avoid CWA violations is to require modern rest rotation grazing in which the herd is moved to a new location every 10 days. The physical separateness of the proposed Allotments' pastures/meadows makes rest rotation grazing eminently feasible, yet FS managers failed to even seriously consider it or any real changes to the manner in which these allotments are managed.

That is arbitrary, capricious and an abuse of discretion.

**c. Expanding the Middle Tompkins Allotment into the Grider Creek Key Watershed is likely to result in accelerated degradation of water quality:**

The Grider Creek key watershed has recently been subjected to high intensity wildfire, fire suppression impacts and salvage logging. The watershed has also long been subjected to unmanaged grazing in its headwater basins. The stream has experienced recent debris flows, sediment events and related impacts to the stream channel. Cumulative impacts are significant.

Expanding the proposed Middle Tompkins Allotment into Grider Creek watershed is likely to significantly add to those impacts and retard watershed and water quality recovery in violation of the Clean Water Act and Aquatic Conservation Strategy. Expansion is also likely to result in overstocking of those lands with cattle due to the likelihood that cattle from both the Big Ridge and proposed Middle Tompkins Allotments can be reasonably expected to graze the Grider lands as has been the case historically and in the recent past.

Because of these likely impacts, including cumulative impacts, KNF managers should consider an alternative that does not append Grider Creek lands to the proposed Middle Tompkins Grazing Allotment. The best course now would be to exclude those lands from the proposed Middle Tompkins Allotment and consider adding them to the Big Ridge Allotment. By stipulated legal settlement KNF managers are obligated to begin work on an EA for the Big Ridge Allotment before the end of 2016.

**d. Cumulative Impacts:**

KNF managers propose reauthorizing grazing, newly authorizing grazing, extending the area to be grazed and extending the period each year during which grazing can occur in an area that has been significantly negatively impacted in recent years by wildfire, discretionary suppression actions, road construction/reconstruction and logging. Because cumulative impacts of grazing along with those other factors are likely to be significant, affecting the ability of a key salmon watershed to function as a refugia for salmon, an EIS must be prepared.

The Draft EA states that “*the Westside Fire Recovery Project is the only project considered for cumulative effects.*” That is an error that should be corrected. Cumulative impacts to the entire area, including those watersheds directly impacted and to the Scott and Klamath Rivers must include, in addition to the Westside Project impacts from:

- 2014 wildfires.
- 2014 discretionary fire suppression impacts.
- The Lover’s Bar Project.
- Big Ridge Allotment grazing.

Compliance with the Aquatic Conservation Strategy and NEPA requires consideration of all the above identified impacts both in general and on the functioning of the Grider Creek Key Watershed, including the Coho and Chinook Salmon refugia formed in the Klamath River at the mouth of Grider Creek by cool water from Grider Creek.

The combined impacts of the Big Ridge Allotment and the proposed expansion of the Middle Tompkins

Allotment on baseflow in Grider Creek are of particular concern and should be fully analyzed and disclosed. Passive Season-Long Grazing on the Big Ridge Allotment has resulted in hydromodification of the following headwater basin meadow systems which are the “sponges” that should sustain baseflow:

- Cliff Valley
- Stones Valley
- Grider Valley

The best available science, as exemplified for example in the Project's Report by hydrologist Jonathan Rhodes, must be used to analyze and disclose the likely impact of grazing those headwaters along with the proposed impacts if an additional large number of cattle (as many as 166 large bovines), managed via passive season-long grazing, are introduced into the Grider Creek headwaters.

**e. Potential impacts to recovering Gray Wolves are not adequately assessed.**

With respect to Gary Wolves the Wildlife BA/BE makes this assertion:

*“Because the only known wolf dispersing through the project area returned to Oregon and the currently Lake Mountain & Middle Tompkins Range Allotment Management Plan Project Biological Assessment/Evaluation known wolf family (Shasta Pack) are >50 miles from the project area, the Project will have no effect to gray wolves and the species will not be addressed further in this document. If a wolf den is documented within the allotment boundaries the Forest will initiate consultation with FWS.”*

The statement is erroneous. Gray wolves are in the process of re-occupying the Northern California; wolf researchers and California DFW wildlife biologists expect the Gray Wolf to continue to recover, expanding the species range in Northern California. There is a distinct possibility that wolves will reoccupy the Project Area within the ten year life of the proposed grazing permits. Therefore, NEPA requires that potential impacts if that takes place must be evaluated and considered now. In addition, is it not true that good management anticipates future issues and conflicts? When a pack establishes in the project area is too late! KNF managers should plan now so that they can effectively prepare for and manage cattle depredation by wolves and the likely resulting rancher-wolf conflicts

KNF officials must assess and display the likely impacts of the return of grazing to this area on the Gray Wolf; including the impact grazing would have on the primary prey animals for returning wolves. On the KNF elk are the primary wolf prey. Elk and cattle compete for available forage. Therefore it is likely that reauthorizing and expanding grazing as proposed will have a negative impact on the elk population and, via elk as prey, on reoccupying wolves.

We question the proposed decision to put up to 166 cattle onto KNF lands that have not been grazed for over a decade. Such a decision is likely to result in more cattle depredation and more conflict between ranchers and wolves when the wolves do get to the proposed grazing expansion area. That does not seem to us to be a wise decision and we ask KNF managers to consider the consequences. As the old say goes: an ounce of prevention is worth a pound of cure. KNF managers should not exacerbate what is likely to be a contentious return of the Gray Wolf to Siskiyou County. Preparing for the Gray Wolves return is the wise course.

To protect the prey base and if grazing is returned to the Grider lands, the number of exotic livestock permitted to graze there must be based on the amount of forage available for them net of the amount expected to be consumed by elk. Those calculations have not been made; that should be corrected in the final EA

When wolves occupy public land with livestock grazing allotments, there is enhanced opportunity for predation by the wolves on livestock. That inevitably leads to pressure to remove the wolves as occurred recently on a national forest in Washington State. Authorizing grazing in areas that have not seen grazing for over a decade is likely to increase rancher pressure for wolf removal.

Because the Gray Wolf is ESA listed, because reauthorizing grazing as proposed would likely significantly impact the recovery of the Gray Wolf in California and because Gray Wolf recovery is a matter of great public controversy, KNF officials must prepare an EIS if they choose to expand grazing into the Grider Creek key watershed, expand the season of grazing use and return grazing to lands that have not been grazed by exotic livestock in over a decade.

KNF officials must consult with the US Fish & Wildlife Service on impacts to ESA listed Gray Wolves and, while it is not a legal requirement, with the California Department of Fish & Wildlife because the Gray Wolf is listed under provisions of the California ESA.

#### **f. Socioeconomic Impacts**

The draft EA's socioeconomics analysis is incomplete. It considers only the impacts of the proposed project on the agricultural economy of Siskiyou County. However, socioeconomic data easily accessible from government sources documents the fact that over the last 30 years the economy of Siskiyou County has evolved and diversified. During that period agriculture production has been largely static while transfer income from retired persons and income resulting from footloose businesses and others choosing to live in Siskiyou County for quality of life reasons has increased significantly. That trend is expected to continue and it suggest that, if KNF managers want to consider the economic impacts of their decision, the managers must consider impacts to quality of life factors. If they fail to consider impacts to the considerable segment of local and regional economy that is dependent on quality of life factors, KNF managers risk making decisions that negatively impact local and regional economies.

A prime quality of life factor is water quality. The proposed decision (preferred alternative) would allow water quality in key and other watersheds to continue to decline; it would also negatively impact baseflow in streams, including in a key salmon watershed which would negatively impact persons and communities which depend on salmon for economic health and subsistence. The preferred alternative would, therefore, result in a transfer of real income from those whose incomes depend on salmon and clean water to those whose incomes depend on public land grazing. The proposed decision is highly likely to negatively impact tribal economies and communities, commercial and sports fishing economies and communities and water-based recreation economies and communities. Those likely economic impacts must be disclosed to comply with NEPA.

From an economic standpoint, KNF managers should not favor one industry over others, one commercial use over other commercial uses, and one part of the Klamath River Basin (the Scott and other agricultural valleys) over another part of the Basin (river, coastal and tribal communities).



## **Conclusion:**

It is concerning that KNF managers appear to have cherry picked data, omitted relevant data and tailored assessments with the intention of supporting a decision to reauthorize grazing and expand it significantly into a key salmon watershed which has been recently degraded as a result of wildfire, discretionary wildfire suppression, salvage logging and road building.

As detailed above, the draft EA lacks analysis and seeks to substitute professional judgment for analysis. For that reason and others it does not provide an adequate basis for decision making.

The proposed action is controversial and is likely to significantly degrade the environment. For that reason, if the proposed project is chosen for implementation, an EIS must be prepared.

There is a better way. EPIC, KFA and the Project urge Ranger McArthur to:

- Drop the proposed expansion of the Middle Tompkins Allotment into the Grider Creek key watershed and roadless area.
- Fence all large willow stands on both allotments to exclude cattle in order to allow Willow Flycatcher breeding habitat to recover.
- Drop the proposed extension of the grazing season to October 30<sup>th</sup>; instead end the grazing season on both allotments no later than October 1<sup>st</sup> to avoid extra damage to water quality and riparian areas when large and long October storms occur as is usually the case.
- Mandate and implement modern grazing management systems like rest rotation grazing; do not allow passive season-long grazing in which cattle self distribute, i.e. chose where they go and how long they stay there, because that leads to degradation.
- Develop systematic MIM (Multiple-Indicator Riparian Monitoring) that fully complies with the MIM protocol. Systematic monitoring means a scientifically defensible monitoring design which fully complies with the MIM protocol and which is in reality, and not just on paper, implemented by a multi-disciplinary team.

EPIC, KFA and the Project urge and encourage Ranger McArthur to choose the better way.

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## **Appendix 1: Scan of Middle Tompkins Allotment Map from the 1994 EA:**

(Please see next page)

