

Neil Bosworth
Tonto National Forest Supervisor
2324 E. McDowell Rd
Phoenix, AZ 85006

Submitted via email to: objections-southwestern-tonto@usda.gov and hand-delivered to Neil Bosworth, Tonto National Forest Supervisor, 2324 E. McDowell Rd., Phoenix, AZ 85006

RE: Bar X and Driveway Grazing Authorization Objection.

Dear Supervisor Bosworth,

The following objections to the Bar X and Heber-Reno Sheep Driveway Grazing Authorization project on the Tonto National Forest, Pleasant Valley Ranger District in Gila County, Arizona, the Final Environmental Assessment (FEA), Finding of No Significant Impact (FONSI) and Draft Decision Notice are submitted on behalf of Neighbors of the Mogollon Rim (NOMR), a nonprofit corporation whose purpose is to preserve and protect the scenic and natural beauty, fish and wildlife, ecological, and other natural resource values of the Mogollon Rim area, particularly its public lands managed by the U.S. Forest Service.

The Forest Service letter dated September 9, 2019, states “the proposed action would accomplish the purpose of *authorizing grazing* on the Bar X allotments in a manner consistent with the direction to *move ecosystems towards their desired conditions*, per FSH 2209.13, Chapter 90, Section 92.22.” (emphasis added). NOMR respectfully disagrees that Option B would move the ecosystems towards their “desired conditions.” Previous thorough studies by the Forest Service conducted on the Bar X allotment refute that. Furthermore, the statement supports the inference that “Option A” was/is no choice at all, (although it would clearly move ecosystems to their desired conditions) leaving only ONE option for your consideration. NOMR has previously submitted comments to the Preliminary Environmental Assessment on April 3, 2019 and the Draft Environmental Assessment on July 19, 2019. NOMR also respectfully disagrees with the District Ranger’s finding of “no significant impact” and therefore objects to the use of an EA/FONSI to approve this project rather than completing an Environmental Impact Statement (EIS).

INTRODUCTION:

In its 154 page FEA, the authors cite to a total of 125 various studies and articles dating back to the 1920’s. Glaringly absent is ANY discussion of the “thorough on the ground

investigation” conducted of the Bar X allotments in the 1970s and 1980s by the United States Forest Service (Forest Service). These studies are the “gold standard” for THIS grazing allotment. These are the “trials” for this allotment. NOMR pointed out these studies in our comments to the Preliminary Environmental Assessment (PEA) and Draft Environmental Assessment (DEA). Because the Forest Service failed to cite its own studies in its DEA, we attached those studies to our comments to the DEA. In the FEA the authors state the ID team “reviewed and considered the prior “studies” of the Bar X past but chose to rely on the “most current data and best available science” for the Environmental Analysis. We believe your staff does you a disservice, and the Tonto a disservice, and the public a disservice by failing to take a hard look at these thorough studies conducted by your predecessor, Jim Kimball. These prior studies are very relevant and in fact the best available science and most current data on effects of grazing in the Colcord and Haigler Creek pastures because those pastures have not been authorized for cattle grazing since those studies occurred, except in 2015. It is unreasonable to dismiss data collected during the last extended period of cattle grazing in that area, which showed significant adverse effects of that grazing on many resources. The current data on which you are relying in the FEA was collected after those areas had not experienced the effects of sustained grazing for more than thirty five years and therefore is not relevant for assessing how grazing has affected these resources. There is no reason that the adverse effects of grazing that occurred previously will not occur again if these pastures are re-opened, particularly because the conditions in these areas are even drier and more vulnerable to impacts due to increasing effects of climate change. You are the chief steward of the Tonto National Forest and we respectfully request that before making your final decision on the proposed action, you personally review the studies of this very allotment. The following studies should be part of the administrative record for this decision but are attached hereto for your convenience:

- Bar X Range Allotment Analysis (1978) (**Exhibit A**);
- Environmental Analysis Report - Placement Of The Bar X, Colcord, Young and Haigler Creek Allotments Under Management (1978)(**Exhibit B**);
- Allotment Analysis (Allotment Acreage and Grazing Capacity Summary)(**Exhibit C**)
- Allotments Bar X, Haigler Creek and Young Management Plan (1981-1985)(**Exhibit D**);
- Environmental Assessment (1985)(**Exhibit E**)

Other studies conducted, but not produced to NOMR by the Forest Service in response to a FOIA request include:

- Wildlife Habitat Analysis of the Bar X Allotment and Sheep Driveway – 1977.

- Effects of Domestic livestock Grazing on Water and Soils Resources of the Bar X Allotment – 1977
- Bar X Soils Report (1977)
- Bar X Soils Report (1978)

It is a significant concern that the Forest Service scientists failed to even mention the foregoing studies in the 2019 EA. These studies should also be part of the administrative record. Given that Colcord and Haigler Creek pastures have not been grazed by livestock since 1979, except in 2015, all of these prior studies are very relevant concerning the impacts of sustained livestock grazing on the resources in these specific pastures.

A second significant problem with the FEA is that it provides only two alternative actions for your consideration that present an “all or nothing” choice. Alternative A excludes grazing entirely on ALL Bar X pastures, not just the Colcord, Haigler and Reno-Sheep Driveway pastures that had been closed to grazing 40 years ago. Alternative B allows for 552 Cattle Year Long (CYL) which is greater than the 468 authorized in the 1970s when the Forest Service documented severely degraded and even destroyed forest resources.

So either no grazing at all, or grazing (1) in numbers greater than what the Forest Service has previously documented as causing severely degraded forest resources and 2) expanding into All areas that have been closed for 40 years. No middle ground alternative was assessed, other than a conclusory statement that the current permit, “was not analyzed in detail as it does not meet the purpose and need to manage resources in a manner that achieves Forest Plan objectives and desired conditions . . .” (FEA at p. 56). The rejection of an alternative that would continue the management that has been occurring for the last forty years was arbitrary and capricious. The agency’s failure to consider a reasonable range of alternatives violates the law.

A third significant problem is that the FEA elevates cattle above the primary objectives for area 5D. The main resource objectives in the area of the closed Colcord pasture and Haigler Creek (Management Area 5D) is for “primary emphasis on intensive, sustained yield timber management, timber resource protection, **creation of wildlife habitat diversity, increased populations of emphasis harvest species, and recreation opportunity.**” (See Tonto Forest Plan at page 151)(emphasis added). Direction for this particular area is to manage “suitable rangelands” at “Level D,” and improve grazing management for rangeland in less than satisfactory condition. “Suitable range” is defined as “[r]ange accessible to livestock or wildlife, and that can be grazed on a sustained yield basis **without damage to other resources.**” (See Tonto Forest Plan at page 151)(emphasis added).

In the absence of cattle the Colcord pasture has an abundance of wildlife including elk, deer, turkey, fox, bear, coyote, mountain lion and the list goes on. The Forest Service has

conducted NO study of the forage biomass necessary to sustain the elk and deer populations present in Colcord. These kinds of evaluations can and have been done. See e.g., Jarbidge Elk Herd Habitat Evaluation: Nevada Department of Wildlife Hunt Unit O72, Jeffrey L. Beck, Ph.D., James M. Peek, Ph.D., Department of Fish and Wildlife Resources, University of Idaho, Moscow, Idaho 83844 (January 2004)¹. The Tonto Forest Plan authorizes grazing in area 5D as long as it does not damage other resources. Wildlife diversity takes priority over cattle in unit 5D. A study of the biomass necessary to sustain the elk and deer populations should be conducted before allowing cattle into Haigler and Colcord pastures which have been closed for 40 years. The Forest Service's own studies on this allotment (discussed below) document how cattle displaced elk and deer when those pastures were grazed by cattle, but the numbers of elk and deer have increased substantially since then. The Forest Service conducted no assessment of what the current forage needs of the elk and deer are to determine how much excess forage would be available for cattle after the needs of the other ungulates are met.

Finally, the Forest Service's failure to complete an Environmental Impact Statement (EIS) and instead rely on an Environmental Assessment (EA) is unreasonable and unlawful. Given that the proposed action will expand grazing into large areas that have not been grazed for decades, and which contain numerous threatened, endangered, and sensitive fish and wildlife species, including the Mexican Spotted Owl (which has critical habitat in the Colcord pasture (FEA at page 60)), the Narrow-headed garter snake, Chiricahua leopard frog, and Gila trout, the negative effects of cattle reintroduction to these species is significant and requires an EIS. And after a 40 year closure of Colcord and Haigler Creek pastures, there certainly will be significant negative effects as well on the big game species including elk, deer and turkey, warranting an EIS.

REVIEW OF PRIOR FOREST SERVICE STUDIES CONDUCTED ON THE BAR X:

In the 1970s, the Bar X had been permitted for 468 cow/calf pairs Yearlong (CYL) plus yearlings for 10 months. Roughly 7686 AUMs. (See Exh. B at p.3, Exh. C at p.1). These numbers resulted in severe degradation of forest resources as described in the 1978 Range Analysis. Alternative B proposes 552 CYL on this same allotment, up to 9250 AUMs. Because the FEA dismisses those prior studies without thorough review, those studies are discussed in detail herein for your consideration and the public record.

In preparing the 1978 Range Allotment Analysis (Exh. A), the Forest Service did extensive on-the-ground field mapping and analysis utilizing no less than six (6) soil and conservation specialists. Production and Utilization studies were done in 1973, 1974,

¹ <http://www.uwyo.edu/esm/faculty-and-staff/beck/files/docs/publications/jarbidge-elk-study-final-report-revised.pdf>

1975, 1976 and 1977. (Exh. A at p.3). Based on the permitted 468 CYL they found utilization high and often exceeding 80% (Exh. A at p.3), and at least removal of 70% of forage production each year. (Exh. A at 19). Based on 468 CYL they found zero (0) acres in good or excellent condition. (Exh. A at p.3). Notably, when the studies were done, precipitation was above normal in 1976 and 1977. (Exh. A at p.1, precipitation chart at p.2.). At the permitted level of 468 CYL, the woodland grassland areas at the 5500-5900' elevation were rapidly deteriorating and the Pine type was severely depleted. (Exhibit A at p.2). Based upon the 468 CYL, grazing capacity was reduced each year and "resulted in a denuded watershed with intolerable soil loss." (Exh. A at p.2). "Watershed conditions were deteriorated throughout the woodland zone by a lack of ground cover that allowed extensive run-off causing sheet and gully erosion." (Exhibit A at p.4). At the permitted number of 468 CYL, wildlife habitat was significantly damaged by removal of herbaceous plant cover (grass) and often by direct livestock/wildlife competition for food. (Exh. A at p.4).

The Forest Service found that the "current stocking rate [of 468 CYL with all yearlings for ten months] is too high to enable implementation of a grazing system that will provide resource protection and favorable impact on range conditions." (Exh. A at p.4). And it's not as though the Forest Service hadn't previously tried to allow cattle numbers at this level. Although the 1966 Range Analysis indicated a capacity for 2,532 AUM's (50% less than permitted in 1978), rather than force a reduction in AUMs an "intensive allotment management plan was attempted that included a grazing system, nonuse for resource protection (890 AUM) and extensive juniper eradication." It didn't work! It did not work because 468 CYL was too high then, and it's too high now – the land can't support it.

A fair and unbiased review of the studies attached hereto is proof that Alternative B, 552 CYL, is NOT viable. Cattle have not gotten smaller. But the climate has gotten warmer, and precipitation has decreased, meaning that even less forage production occurs these days than it did in the 1970s.

Other significant findings by the Forest Service resulting from its thorough analysis of this allotment conducted in the 1970s at a time when 468 CYL were permitted included:

- a) "Grass production in the Pine type was extremely low, often less than 50lb/acre." (Exh. A at p.8);
- b) Data collected and compared from 1964 through 1975 for the 1978 Range Analysis demonstrated in one area (C1T3) 90% of the plants recorded in 1964 were dead. (Exh. A at pp.26-31);

- c) “Effective ground cover is currently less than the amount required to protect the soil due to overuse by cattle.” (Exh. A at p.18);
- d) “The lack of vegetative cover allows a large percentage of precipitation to run-off, rather than percolate into the soil.” (Exh. A at p.18).
- e) “The Ponderosa Pine type [was] depleted severely by overgrazing.” (Exh. A at 19);
- f) “Chaparral zones are grazed excessively . . . [with] extreme hedging on the desirable browse.” (Exh. A at p.20);
- g) “[O]verstocking [of 468 CYL] forced cattle into [the oak woodland zones] and drastically deteriorated the understory plant community.” (Exh. A at 21);
- h) With the “overstocking” [of 468 CYL], “use of salt as a distribution tool [was] of no great value.” (Exh A at p.5);

As for the riparian areas, the thorough Forest Service studies in the 1970s found:

- i) Riparian areas saw “extensive resource damage” and [were] “severely denuded by grazing,” including Colcord Canyon, Naegelin Canyon, Cherry Creek, Haigler Creek, and Pine Creek. (Exh. A at 21);
- j) The Forest Service recognized that riparian areas “are an extremely important element of wildlife habitat and fisheries. . . [and] quality watersheds.” (Exh. A at 21);
- k) The Forest Service found that overgrazing caused by 468 CYL resulted in “[r]educed herbage production, extensive severe erosion, soil compaction, and stream siltation . . . [resulting] in degradation of the quality habitat needed to sustain healthy diverse wildlife populations.” (Exh. A at p.22-23
- l) The Forest Service found that “the fishery along Haigler Creek [was] damaged because of extreme livestock utilization of riparian vegetation and siltation resulting from upstream erosion. . . . Desirable insects for trout such as mayflies are quite scarce. Heavy silt deposition in the streambed is detrimental to the spawning requirement of trout. Extreme utilization has resulted in extensive

resource damage. Haigler Creek has been severely denuded by grazing.” (Exh. A at 23);

- m) The riparian areas [based on 468 CYL] were in a deteriorated state. The soil did not have adequate vegetative ground cover and sediment was degrading and polluting the aquatic environment. (Exh. A at p.24).

With regard to wildlife, the Forest Service documented the degradation of range resources caused by 468 CYL:

- n) “Extreme overuse of grass and browse on the Bar X and Heber Reno Sheep Driveway has severely damaged the wildlife resource. Reduced herbage production, extensive severe erosion, soil compaction, and stream siltation are the results of overgrazing in the area. **This damage has resulted in degradation of the quality habitat needed to sustain healthy, diverse wildlife populations.**”(Exh. A at p.22)(emphasis added);
- o) “Of the three primary needs of all wildlife species . . . food and cover have been the most severely damaged [by overgrazing] . . . **which has reduced the capability of the land to support viable populations of wildlife species that one would expect to find.**”(Exh. A at p.22) (emphasis added);
- p) “Excessive grazing by livestock eliminated cool season grass species in the woodland zone.” (Exh. B at p.3);
- q) “**Wildlife habitat has been damaged significantly by the removal of herbaceous plant cover. The decrease in forage production induced by continuous overgrazing has greatly reduced the required cover for viable populations of game and non-game species of wildlife.** The near elimination of cool season grasses from the plant community in the woodland zone by domestic livestock grazing has resulted in habitat without the diversity of plant species needed. **The limitation of plant diversity in turn limits the diversity of wildlife species to be found. Deer and cattle are in direct competition for browse. This is especially evident in the pine type, but is also a concern in the lower elevation, woodland areas.**” (Exh. B at p.4) (emphasis added);
- r) “Much of the Pine type is delineated as no capacity because of steep slopes (40% +) in conjunction with a lack of forage.” (Exh. A at p.9);

- s) “A prolonged history of overstocking and unsatisfactory management has depleted the range resource to a very critical point. Nearly all desirable cool season grasses such as bottle brush, squirrel tail, mutton grass, and western wheatgrass have been eliminated from the plant community. The Pine type is severely depleted of all vegetative groundcover.” (Exh. B at p.3-4);
- t) In the “Pine type” . . . “Needle cast is two inches deep with herbaceous forage nearly absent.” (Exh. A at p.10);
- u) “The woodland (Pinyon-juniper)/grassland areas have rapidly deteriorated under previous stocking levels.” (Exh. E at P.2);
- v) “The vegetative resource of the Bar X is depleted drastically in terms of forage production, plant density, desirable species composition and diversity. Historic overstocking, as well as current overstocking, have induced plant community retrogression.” (Exh. A at p.18);

With respect to soils and the critical watershed (the primary purpose for which the Tonto National Forest was established) the Forest Service found:

- w) “Watershed conditions are quite deteriorated throughout the woodland zone. . . with many dry denuded riparian areas that were at one time dotted with springs.” (Exh. A at p.4);
- x) “Soils in the pinyon-juniper and grassland types have been adversely affected by the severe overstocking and mismanagement that has existed on the range. The excessive utilization of grass by livestock has resulted in a loss of plant vigor and grass plant die-off. Effective ground cover is currently less than the amount required to protect the soil due to overuse by cattle. The lack of vegetative cover allows a large percentage of precipitation to runoff rather than percolate into the soil.” (Exh. A at 18);
- y) A lack of vegetative cover allows extensive, rapid moisture run-off, causing sheet erosion and gully erosion. (Exh. B at p.4);
- z) “...under current management and stocking, effective groundcover has been reduced sufficiently to allow soil loss in excess of 5 tons per acre. This erosive condition is quite extensive and is found throughout the Bar X with few

exceptions.” (Exh. B at p.7). Based upon 468 CYL excessive soil loss was occurring on 97% of the land on the Bar X. (Exh. B at p.12);

The Forest Service concluded: “Current Bar X conditions are a result of the excessive abuse and mismanagement of the grazing resources.” (Exh. A at pg.24). The Forest Service predicted that “the continuation of present management and overgrazing will, over a short period of time, irretrievably destroy the range resource due to excessive plant and soil loss.” (Exh. B at p.22);

Following these thorough on the ground studies that documented conditions based upon 468 CYL with yearlings for 10 months, the Bar X ranch was placed under intensive management, reducing the herd size from 468 CYL to 59 CYL, and excluding further grazing in the Turkey Peak Pasture, Haigler Creek, and Colcord Canyon Pasture (referred to in the FEA at p.8 as Colcord Pasture) that now surrounds the communities of Colcord and Ponderosa Springs. (Exh. D at p.1).

The above findings were based upon a permit that allowed 468 head of cattle to graze year-long totaling 7686 AUMs, and yet in the FEA (page 39) it proposes up to 9250 AUMs, roughly 552 cow/calf pairs plus 160 yearlings (FEA page57). This proposal seems shockingly irresponsible given the documented destruction of resources on the Bar X with just 468 head of cattle year-long. The Forest Service decision to ignore the past studies of this allotment is arbitrary and capricious. The Forest Service cites to an unpublished Grazing Capacity Analysis (FEA p.41) that it relied on to help develop the proposed action. A FOIA request of April 10, 2019 requested “1. The Grazing Capacity Analysis as described on page 27 of the “Bar X Allotment & Heber-Reno Sheep Driveway Grazing Authorization – Preliminary Environmental Assessment.” In its May 17, 2019 response, the Forest Service sent 6 pages of data that constitutes the Grazing Capacity Analysis, with only one page regarding the Colcord Pasture. (Exh. F, attached hereto). The Forest Service’s decision to rely on this document, which can hardly be characterized as a scientific analysis, coupled with its failure to cite or discuss its own studies which documented how 468 CYL had devastated the forest resources in the 1970s, reflects a bias to elevate the permittee’s success and productivity above all else, contrary to direction in the Forest Plan and showing the Forest Service did not take a hard look at the effects of the action because it irrationally excluded important information from its analysis.

After the near devastation of forest resources caused by overgrazing as documented in the 1970 studies, the Forest Service set long-term goals for the Bar X which were: reversing the downward trend of the range condition, improving and enhancing wildlife habitat,

improving aquatic habitat along perennial streams, improving deteriorated watershed conditions, and improving soil condition by controlling soil erosion. (Exh. D at p. 6-7).

These goals were slowly (and still are being) achieved through the closing of the above-mentioned pastures (including Colcord and Haigler) and the drastic reduction of cattle allowed year-round in those pastures which remained open. An Environmental Assessment conducted about five years later in 1985 evidenced improved range conditions on the Bar X due to the significantly decreased cattle use and intensive management. **The Forest Service noted the wildlife habitat “has improved greatly Probably the greatest evidence supporting this statement is the renewed presence of elk below the Naegelin Rim, historically an elk winter range.”** (Exhibit E at p. 5). The Forest Service also stated that the abundance of turkey has increased throughout the allotment and riparian areas have responded favorably to improved management. (Exhibit E at p. 5). It was at this time the Forest Service determined the appropriate permitted amount to be roughly **100 head** of cattle yearlong, not including calves. The Forest Supervisor noted this was a conservative stocking rate that **“includes the needs of wildlife.”** (Exh. E at p.5)(emphasis added)

During the same year as the 1985 EA, the Forest Service completed the 1985 Tonto National Forest Plan which is currently under revision but is still the governing Forest Plan. The Plan contains goals, objectives, standards and guidelines that provide management direction for various resources and uses of the forest. The main resource objectives in the area of the closed Colcord pasture and Haigler Creek (Management Area 5D) is for “primary emphasis on intensive, sustained yield timber management, timber resource protection, creation of wildlife habitat diversity, increased populations of emphasis harvest species, and recreation opportunity.” Direction for this particular area is to manage “suitable rangelands” at “Level D,” and improve grazing management for rangeland in less than satisfactory condition. “Suitable range” is defined as “[r]ange accessible to livestock or wildlife, and that can be grazed on a sustained yield basis without damage to other resources.” (See Tonto Forest Plan at page 151)(emphasis added).

For suitable rangelands, the Forest Plan calls for the Forest Service to evaluate “grazing capacity” for allotments through production/utilization surveys. “Grazing capacity” is the “maximum number of animals that can graze an area without damage to the vegetation or related resources.” Past grazing capacity estimates on the Bar X by the Forest Service have been ignored. The Forest Service, after the destruction caused by 468 CYL (7686 AUM), estimated the grazing capacity as 710 AUMs in the Allotment Management Plan (Exh. D at page 5) and then moved that number upwards when conditions improved, permitting 1200 AUMs and 100 CYL, with an estimated capacity of 1300 AUMs. (Exh.

E at p.5). Prior to that, the Forest Service, as part of its 1966 EA, estimated grazing capacity at 2,532 AUMs for the entire allotment. We know from past grazing on this very ranch, when all allotments were open, that 7686 AUMs destroyed the range resources. Climate change has made the area drier since then so these capacity numbers are certainly higher than what the area can sustain currently, yet the Forest Service is authorizing far more grazing than any of these prior capacity analyses support.

In disregard of previous studies, the Forest Service instead relies on a small amount of data from the last 12 years (FEA at p.8) and cites to the unpublished and minimal Grazing Capacity Analysis that hardly qualifies as a holistic and thorough evaluation of the ecosystem. And there has been no new suitability determination despite a 40 year closure to cattle in Colcord and Haigler Creek pastures.

The skimpy data in the Carrying Capacity Analysis (Strula and Bedson) that is relied on in the FEA only looks at the needs of cattle (FEA pp. 127-129) and ignores the nutritional biomass needs of deer and elk.² Therefore, it does not support such a significant increase in cattle as proposed in the FEA nor support introduction of cattle into Haigler or Colcord areas that have enjoyed a 40 year absence of cattle.

Since the Bar X was purchased in 2007 with a permit of 130 adult CYL, the Forest Service states it had been authorizing an average of 234 cow/calf pairs yearlong (roughly 3707 AUM), but it continued to exclude cattle from the Colcord and Haigler pastures.³ It further states that “[d]uring the 2015 and 2018 grazing season, cattle were authorized to use these areas on a trial basis so data could be gathered for this National Environmental Policy Act (NEPA) analysis of the proposed grazing authorization to determine if there were negative effects to the other resources (FSH 2209.13).” (FEA at p.8). This statement is inaccurate because the cattle did not actually enter the closed pastures in 2018. Furthermore, with respect to 2015, while the Forest Service states the cattle were allowed in on a trial basis pursuant to FSH 2209.13, a Freedom of Information Act request shows that there were no Forest Service documents prior to the 2015 AOI that mentioned grazing the closed pasture on a “trial basis” under Section 2209.13 and the AOI itself did not discuss it. Nor was there any written determination that such grazing was consistent with the Forest Plan and would benefit management of the rangeland resource. A Forest Service email in April 2016 indicated that a “trial basis” had never been contemplated, instead stating the Turkey/Colcord Pasture was grazed in 2015 after many years of non-use in order to spread out livestock use on the Bar X, and incorrectly

² See Beck and Peek’s Jarbridge evaluation at Chapter 3 and Chapter 5.

³ NOMR addressed this in a lawsuit. A copy of the lawsuit is available at www.rimneighbors.org

stated that this pasture had been included in the stocking capacity assessment for that group of allotments and had never been removed from the grazing allotment. The email did not mention FSH 2209.13. (Exh. G) The Forest Service's attempt to re-open these pastures in 2015 and 2018 before completing any NEPA analysis or other public process shows its bias toward the rancher and that it had predetermined its decision here before it even conducted the necessary analysis.

The 1985 Allotment Management Plan (Exh. D) has been the governing long-term plan for the allotment. With respect to the closed pastures, it stated: "follow up evaluations to be conducted during the life of the management plan will include inspections of those areas which have been closed to grazing (Turkey Peak Unit and Colcord Allotment, etc.). These inspections will be for the purpose of determining the extent of resource recovery, and whether more in depth studies should be initiated." (Ex D at p12). It is not known what inspections have been done, and certainly no "in-depth" studies have been performed. In sum, there is not sufficient data to support a large increase in grazing capacity to justify the livestock use being authorized in the FEA.

So what has changed since the Forest Service's evaluation of this very land in the 1960s, 1970s and early 1980s that allows the Forest Service to now disregard its past studies and recommend numbers greater than what the Forest Service documented as causing severe degradation of resources on this very allotment? What has changed since then is that Arizona has been in a long-term drought. Another change is the population of Phoenix has more than doubled from 1980 to 2017. (<http://worldpopulationreview.com/us-cities/phoenix/>). With a Phoenix Metropolitan population of 4.5 million in 2016, projected to grow to 6.3 million by 2030, the adjacent Tonto National Forest should see even greater demand from Arizonans seeking recreational opportunities and need for greater watershed quality protection.

Today, more people from the Phoenix area recreate under the Mogollon Rim than did in the 1970s. The fact is that cattle negatively affect recreational opportunities by their mere presence which: increases negative human – cattle encounters; necessitates barbed wire fences; fouls streams where people camp, swim and fish; brings nuisance pests such as flies, etc. to campgrounds through their waste; and the list goes on. The impacts of cattle on streams, soils, and vegetation are even greater now than in the 1970's due to climate change and drought, so the carrying capacity of the land for grazing is likely even less now, yet the Forest Service, counterintuitively seeks to put in MORE cows. Cattle further impede recreational opportunities as established by the Forest Service's own studies because they compete directly with elk and deer for the limited forage, driving out that wildlife and destroying the riparian habitat necessary for healthy fisheries and other aquatic species.

REVIEW OF THE FEA

With the foregoing in mind, we turn now to specific comments on the FEA.

The Forest Service recommendation for 552 CYL must be viewed through the lens of past history (See Exh. A at p.33), and studies on the allotment (See Exh. A-E), the Forest Plan objectives for management areas 5B, 5D, and 5G, and the warmer climate, less precipitation, long-term drought, greater population seeking recreation in the Tonto, and changes in land-use patterns over time.

Past studies from the 1970s have been completely ignored by the Forest Service in the 2019 EA. Those studies discussed above clearly show that the land could not sustain 468 CYL. Logic, reason, and simple deduction lead to the conclusion that the same land cannot now sustain 552 CYL.

The Forest Service seeks to reopen the Colcord allotment (which includes Haigler Creek) to cattle grazing after a 40 year closure. This allotment also surrounds the communities of Colcord Estates, Ponderosa Springs, and Ponderosa Springs Estates. The Forest Service acknowledges receiving over 170 comments in response to the Preliminary Environmental Assessment, but then brushes aside these comments stating, “[w]hile some comments reflected concerns about safety and conflicts between the multiple uses allowed in the project area, the multiple uses have been practiced in the project area and the overall forest for many years..” (PEA at p. 37). This is not accurate for the Colcord and Haigler Creek areas from which grazing has been excluded the last 40 years.

Furthermore, at page 37 of the FEA the Forest Service characterizes the 250 plus letter comments as “form.” This is not accurate as many of the comments were personalized and signed.

There are an estimated 112 properties in Ponderosa Springs and Ponderosa Springs Estates, and 204 properties in Colcord Estates. Most do not have fences, at least fences that can keep out cows. The community of Ponderosa Springs Estates commenced development in 1982 and has never seen cattle from the Bar X in the entire history of its development, and thus there are few fences. If the Forest Service permits hundreds of cattle into this area, hundreds of residents may well have to spend potentially hundreds of thousands of dollars (collectively) to put up fences to protect their children, septic fields, and gardens, etc. The Forest Service was provided a letter prepared by the Gila County Environmental Engineer dated April 5, 2017 that states cattle grazing over septic leach fields can compact the soil and make it unusable for its intended purpose by restricting air flow to subterranean soils. (Exh. H). So even if the area has capability/capacity for grazing, the allotment, particularly Colcord pasture, is not suitable for grazing given the effects on the private communities, high recreational use of the area and projected further

increases. The action, to reopen Colcord to cattle, will have a significant impact on the human environment and an EIS should be prepared per 40 CFR 1507.7(a)(2).

The main resource objectives in the area of the closed Colcord pasture (Management Area 5D), putting aside timber, is for **“creation of wildlife habitat diversity, increased populations of emphasis harvest species, and recreation opportunity.”** Cattle are the lowest priority in the Colcord area but can be grazed on “suitable range” which is defined as “[r]ange accessible to livestock or wildlife, and that can be grazed on a sustained yield basis **without damage to other resources.**” (See Tonto Forest Plan at page 151)(emphasis added). Again, the Forest Service has not done any studies on the impacts of the grazing on elk and deer. Rather than describing and assessing the potential effects of the proposed grazing on elk and deer, including re-opening important habitat to cattle use, the FEA simply states at page 129 that “competition should not automatically be assumed.” This is contradicted by the Forest Service’s prior studies (See e.g. Exh. A at page 4, Exh. B at page 4) and certainly is not the hard look required under NEPA.

The Colcord pasture was previously determined to be “no capacity” for sustained yield grazing. It is directly below the Mogollon Rim in a Pine forest. The University of Arizona Extension office in conjunction with the rancher apparently put in two data monitoring points in the Colcord pasture in 2014, KA13 and KA14. The KA13 groundcover analysis shows that live basal vegetation comprised only 6% of the total groundcover in September 2014. (**Exh. I** – Vegetative GIS data system, University of Arizona). Letting the cattle in from July to September 2015 depleted that groundcover so significantly that when the next measurements were conducted in November 2015 the live basal vegetation was reduced to only 1%. This would convert to 83% utilization in just 3 months. While the data shows it rebounded the next year, (to 6 %) the prior Forest Service studies show that long-term use by the numbers currently suggested by the Forest Service will entirely deplete the vegetation and soil resources, with the consequence of once again driving out elk and deer and other animals. As noted in the 1970’s studies, the Pine ecotype, which is the primary ecotype in the Colcord pasture, was particularly degraded by cattle. The FEA fails to explain why grazing with even greater numbers in the Pine ecotype will not cause similar degradation to soils and vegetation.

The FEA has a paucity of data on soil conditions (FEA at pp.17 - 20), nothing close to what was conducted in the 1970s as part of that evaluation. Yet even with that inadequate data collection, the Forest Service still found that soil productivity and erosion are fair or poor in all pastures. No pastures were rated as having good overall soil conditions. Likewise, it has sparse data on production/utilization. The basic data collected by the Forest Service for the Colcord pasture is simply inadequate with only two data points in Colcord pasture, which has approximately 10,000 acres and only three years of monitoring from 2014-2017. (**Exh. F**).

Unlike the previous Forest Service environmental assessments conducted in this area, the Forest Service's FEA does not take into account the impact upon important big game species such as elk, deer and turkey and other wildlife in Colcord that rely on the sparse vegetation. Reintroduction of hundreds of cattle into the previously closed Colcord "pasture" will have devastating consequences on the elk, deer and turkey populations. An analysis must be conducted to determine the biomass and nutritional needs of the wildlife populations in the Haigler and Colcord pastures before reintroduction of cattle in order to comply with Unit 5D requirement that cattle do not "damage" other resources.

Turning to watersheds, and in particular Haigler Creek, the FEA (p.11) acknowledges the Tonto Forest Plan for management area 5G and 5D are to manage and improve water conditions to a better condition. It then sets out that the 6th code watersheds are in "fair to poor" condition with Haigler Creek "functioning at risk ." (FEA 24-31). In fact, all watersheds on the allotment are rated as functioning at risk or impaired function. It acknowledges livestock entry will degrade streams. (FEA at 91-93). The 2019 EA claims, "[i]f riparian area utilization guidelines are followed and cattle are moved when use guidelines are met, **the negative, direct effects of grazing will be minimized**, and riparian area and stream channel condition should improve." (FEA at 71) (emphasis added). This is an entirely unsubstantiated, speculative and inconsistent statement. How can the "negative effects" of cattle ultimately IMPROVE the stream condition? This statement ignores the prior studies from the 1970s showing the devastation cattle caused to the riparian areas, and in particular Haigler Creek. There is no question that cattle in the hundreds will once again devastate these riparian areas which are still "at risk." Since cattle have not used Haigler Creek for forty years, any use of cattle is an increase that will degrade riparian resources and will be a significant effect on the creek and habitat it provides for fish and wildlife.

The FEA states the cattle will only be let in for a short time – one to two months, but how can this bring things to "optimal" conditions? And who is to ensure that they will indeed only be in there for one to two months? Will there be a dedicated biologist overseeing this? To this day conditions are still sub-optimal on Haigler Creek and the other streams listed. If the streams are all "at risk," including Haigler Creek, then how will more livestock get us to the desired conditions? The Forest Service acknowledges that livestock have been excluded from the upper half of Haigler Creek since 1979 and it still is not in optimal state. While the FEA notes improved conditions observed on Haigler Creek from 1993 to 2018 (FEA at p.30) this is attributable to the 1979 ban on grazing. Reauthorized grazing that allows hundreds of cattle to use Haigler Creek, combined with the impacts of recreational use, will cause devastating effects to Haigler Creek and the surrounding riparian habitat. This will impact habitat for numerous aquatic species, some of which are listed as threatened or endangered species. An EIS is warranted before letting any cattle back into Haigler Creek after a 40 year absence.

Haigler Creek is one of Tonto Forest's perennial stream gems. The FEA notes that the Arizona Game and Fish Department and the United States Forest Service "restored and improved aquatic habitat and riparian health within two reaches of Haigler Creek. Haigler Creek is managed as a 'put and take' rainbow trout . . . fishery and the goal of the project was to enhance the distribution of fish and increase recreational opportunities for anglers through stream habitat improvements." (FEA at p. 134). It makes no sense to introduce cattle which will negatively impact those efforts. The FEA acknowledges 2.4 miles of critical habitat (FEA at p. 78) for endangered species exist along Haigler Creek. It acknowledges that the threatened Mexican Spotted Owl, Narrow-headed garter snakes (and Gila trout if introduced (FEA at p. 82)) will be adversely affected (FEA at p. 105) by cattle reintroduction.

Haigler Creek should be preserved for wildlife and recreational opportunities which the Forest Service prioritizes in this area over grazing. "Wildlife friendly wire" (FEA at pp. 49, 86) will not enhance the recreational opportunities nor be good for wildlife as compared to no wire at all. Given its negative impacts on recreation, which takes priority in unit 5D, it should be viewed as "damaging other resources." Introducing cattle into Haigler Creek, as the 1970s studies demonstrated, will not move Haigler Creek to "desired conditions," (FEA at p.36) but rather just the opposite will occur. It will negatively affect recreational opportunities, wildlife, water quality, and the fishery. The risk is far greater than any benefits to society. An EIS must be conducted before reintroduction of cattle into Haigler Creek after a 40 year absence due to the closure.

Every factor, when reasonably considered, argues against reintroduction of cattle into the closed Colcord Pasture and Haigler Creek.

Previous studies argue against it (Exh. A-E)

Precipitation is less: The 1979 EA precipitation statistics between 1971 and 1977 show the average annual precipitation was 20.75 inches. In contrast, the average annual precipitation from 2011 to 2017 for the same area is 13.17 inches, over 7 inches less than that recorded in the 1970s. (<http://usclimatedata.com>.) Reduction in precipitation reduces forage production, which in turn reduces the capability of the area to support livestock grazing, and risks driving out wildlife as the cattle compete for limited resources. Wallace, Mark C. and Paul R. Krausman. 1987. *Elk, Mule Deer, and Cattle Habitats in Central Arizona*. Journal of Range Management, Vol. 40, No. 1 (Jan., 1987), pp. 80-83. Society for Range Management. Stable URL: <http://www.jstor.org/stable/3899367>. The Forest Service's own studies referenced above document that the cattle compete directly with deer and elk. Elk and deer densities can decline by as much as 92 percent in response to introduction of livestock. Clegg, Kenneth, "Density and Feeding Habits of Elk and Deer in Relation to Livestock Disturbance." 1994. All Graduate Theses and Dissertations. 969.

<https://digitalcommons.usu.edu/etd/969>. The Forest Service acknowledges that the area has had below-average precipitation and is experiencing drought conditions for 12 of the last 18 years since 2000. (FEA at p. 28).

Drought: It cannot be stressed enough that the impacts of cattle on streams and vegetation are even greater now than in the 1970s due to climate change and drought, so the carrying capacity of the land for grazing is even less now. The Forest Service acknowledges Arizona has been in a long-term drought - it was just last year (2018) that the Forest Service took the unprecedented action of closing the Tonto Forest from May through July due to drought. The Forest Service acknowledges that higher temperatures are projected for the future. (FEA at p. 136).

Cattle don't prevent fires: The FEA attempts to suggest that cattle can play a role in fire prevention. (FEA at 61-62). Yet the Forest Service admits that "Grazing that significantly reduces herbaceous ground cover and increases shrubs and small trees can decrease the potential for beneficial low-intensity ground fires while increasing the potential for destructive high-intensity crown fires." (2019 EA at 98). Cattle also introduce non-native grasses and forbs, which can contribute to a higher fire risk.

Water tanks: The Forest Service takes the position that water tanks won't be maintained unless Alternative B is allowed. First, there are no water tanks in the Colcord pasture that are maintained by the ranch currently. And if cattle continue to be precluded, Arizona Game and Fish can manage any water tanks it deems necessary for wildlife with funds from hunters.

Watershed protection: One of the primary purposes for originally establishing the Tonto National Forest was for watershed protection. The Forest Service recognized in 1978 that "protection of the water and soil resources is even more critical today than it was when the Tonto was established. In order to meet the tremendous demand for renewable resources, maintaining the soil in a productive condition is of the utmost importance . . . protection of the soil and water resources on the Tonto was recently made top priority on the Forest." (Source: 1978 Bar X Allotment Analysis). That statement is even more true in 2019, yet the 2019 FEA does not even cite the statistics showing extreme soil loss due to overgrazing by 468 CYL that was documented by the Forest Service in the 1970s.

Comments/Criticisms of the FEA:

- 1) Previous studies (Exh. A-E) document the land cannot sustain 468 CYL, let alone 552 CYL, particularly in the Pine ecosystem found in the Colcord pasture and the riparian area along Haigler Creek.

The FEA only provides two options, no grazing or grazing above levels the Forest Service has previously documented will devastate the resources. As the

chief steward of the Tonto National Forest we respectfully request that you instruct your staff to review the prior studies and revise the FEA with more alternatives such as keeping the current permitted numbers as well as reducing grazing below the current level. The Forest Service should also consider an option of keeping Colcord pasture and Haigler Creek closed but allowing for some grazing in the Heber/Reno driveway. The Forest Service should reassess suitability before reopening Colcord and Haigler to determine if conflicts with fish, wildlife, recreation, and the private communities make the area or at least parts of that area unsuitable for livestock grazing. After being closed for 40 years, a new suitability determination should have been completed but was not. By considering only 2 alternatives, one of which the does not meet the purpose and need of the action (Alternative A) according to the Forest Service, the FEA fails to consider a reasonable range of alternatives.

- 2) The FEA fails to take a “hard look” at the direct and indirect effects of the proposed grazing. It dismisses effects to fish and wildlife species, including species that are threatened, endangered, or sensitive, big game species, and other wildlife, that will be greatly affected if the Colcord and Haigler pastures are re-opened; it does not adequately address effects to the communities of Ponderosa Springs, Ponderosa Springs Estates, or Colcord Estates; and it relies on mitigation measures and monitoring without providing evidence that those measures will minimize impacts of grazing on soils, vegetation, and wildlife. The FEA even admits that the grazing will likely adversely affect at least two threatened species due to re-opening the Colcord pasture, yet it continues to pursue that path. And even though the priority in area 5D is wildlife diversity, the FEA utterly fails to quantify the forage needs for the existing wildlife in the Haigler and Colcord pastures. In particular, there have been no studies of the biomass requirements of the elk and deer populations in the closed pastures of Colcord and Haigler Creek.
- 3) The capacity analysis is inadequate and doesn’t support the use authorized. The Forest Service should reassess suitability before reopening Colcord and Haigler to determine if conflicts with fish, wildlife, recreation, and the private communities make the area or at least parts of Colcord and Haigler pastures unsuitable for livestock grazing. After being closed for 40 years, a new suitability determination should have been completed. Based on information from the Forest Service’s FOIA responses, a new suitability determination was never completed.

- 4) There also has been no adequate analysis of cumulative effects of grazing on resources when combined with other effects like recreation use, climate change, timber sales, and other projects. Colcord is a vital area for recreationists who hunt, fish and camp and the FEA has no discussion of cattle impacts on those activities that the Tonto Forest Plan gives emphasis to over cattle grazing in area 5D.
- 5) The Forest Service should do an EIS because there are significant effects on the human environment simply from opening an area that has been closed for 40 years and has private communities within it.
- 6) The new proposed grazing is not consistent with direction in the Tonto Forest Plan regarding soils, vegetation, riparian areas, fish and wildlife, and recreation, particularly for management area 5D.

In conclusion, the Forest Service's own extensive studies conducted in the 1970s showed that 468 head of cattle severely degraded the Forest resources. It is a significant concern that the FEA does not cite any of the previous Forest Service studies from the 1970s that demonstrated that 468 cattle year long had severely degraded the Forest resources and led to reduction of numbers of cattle and closure of Colcord pasture and Haigler Creek. How can the Forest Service now justify 552 head of cattle year-round, not including calves? The Forest Service's failure to even cite those extensive studies coupled with a paucity of data and failure to consider other important issues is evidence that the Forest Service did not take the required "hard look" at the effects of the proposed grazing.

NOMR respectfully requests the Forest Service conduct an EIS where a hard (and unbiased) look can be taken. Over the years since the Forest Service reduced the number of cattle from an unsustainable 468 CYL to the current permitted amount of 130 head, the plan was adhered to and the forest resources steadily improved. While not at optimal level (especially the streams), the lands have recovered tremendously from the devastation caused in the 1960s and 1970s by overgrazing 468 CYL and are enjoyed by individuals and families alike such as photographers, campers, hikers, swimmers, recreationists and fishermen as well as hunters. Unit 23, in which the Bar X allotment sits, has become a premier hunting unit due to the return of elk and deer as well as other species of game that now flourish due to the reduction and, in some areas, exclusion of cattle. Revenue from the permits, license fees, hunting and fishing supplies presumably benefit the State. Specialty wildlife license tags like the Governor's tag bring in over one-half million dollars a year and Wildlife Unit 23 which includes Colcord and Haigler pastures sees sportsman looking for prized elk, elk which Bar X cattle could displace. Local communities of towns like Payson, Star Valley and Heber certainly benefit from

the influx of all these recreationists who eat at their restaurants, sleep in their hotels, purchase gas and other supplies, and visit their shops.

Since the Allotment Management Plan was instituted in the early 1980s, the land and resources improved along with recreational opportunities. Now, however, the current owner of the Bar X, Bar X LLC, is pushing for increased numbers of cattle, greater than those that the Forest Service's own studies of the 1970s showed devastated range resources and riparian areas. With the increased numbers of cattle will come decreased and less quality recreational opportunities under the Mogollon Rim. If Colcord is reopened after a forty-year closure it will mean barbed wire fencing, stench from cattle feces, more human/cattle encounters including the potential for young children to be harmed in their yards while playing unless residents pay thousands of dollars to put up fencing to keep the cattle out and it will mean collisions between vehicles and cattle on the roadway, potentially resulting in death.⁴ (See also **Exh. J**, New York Times article).

One cannot come away from reading the FEA without concluding that the primary purpose for the Forest Service's action, is for "the current allotment permittee's success and productivity." But the Forest Service must manage for everyone and for the wildlife habitat. The Forest Service motto is: "Caring for the Land and Serving People."

NOMR respectfully requests that you, as chief steward of the Tonto Forest, require your staff develop additional alternatives that recognize the lessons learned and detailed in the studies of the '70s and '80s that will yield a plan that recognizes and weighs the needs of wildlife habitat, recreationists from a major metropolitan area, the Colcord and Ponderosa communities and a single business entity's cattle business in a sustainable plan rather than accept one that risks a repeat of the destruction of forest resources and wildlife habitat. And let's remember that when the current permittee, The Bar X, LLC, purchased the Bar X ranch in 2006 it knew that it was permitted for 130 head of cattle, and it knew that the "Colcord" pasture and Haigler Creek were closed to grazing. The Forest Service should not be in the business of underwriting the economic prosperity of one entity at the expense of hundreds of homeowners, countless recreationists, hunters and fishers and the wildlife. We do not believe this environment under the Mogollon Rim that supports abundant wildlife and wonderful recreational opportunities should be put at risk, for one company's profit.

In the 1979 EA, Forest Supervisor James Kimball contemplated the weight of his decision to protect the Forest resources:

"Any management action taken which, of necessity, includes reducing the term number of livestock permitted to graze on National Forest Land may be

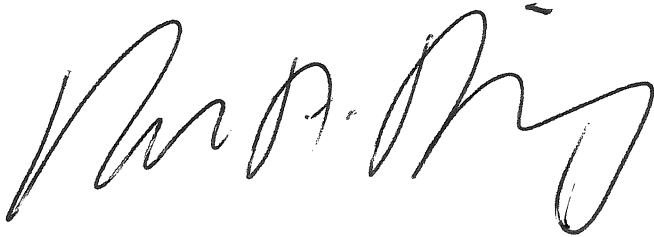
⁴ <https://www.idahostatesman.com/news/local/article45880055.html>

met by resistance from the permittee, local community and the ranching community of greater Gila County and, possibly, the livestock industry at large in Arizona. Implementation of any alternative viewed as "adverse" action against the term permit numbers on the Bar X may result in inquiries by the Congressional Delegation and State Legislators. A continuation of the current management and stocking level will ultimately result in an irreversibly depleted range resource incapable of supporting an economic livestock operation." (Exh. B at p.2).

NOMR is not asking the Forest Service to end grazing on the Bar X. We are asking you to look to the future and make a visionary choice to permanently protect the Colcord pasture and Haigler Creek from livestock grazing, keeping it the way it has been for the last 40 years.

The Forest Service must manage for everyone and for the wildlife habitat, please develop sustainable alternatives and not the "all or nothing" approach presented in the draft FEA. At a minimum, the Forest Service must complete a full EIS that thoroughly and honestly takes a hard look at the impacts to all resources caused by its proposed grazing, and whether those impacts are truly consistent with the Tonto Forest Plan.

Respectfully submitted by Rich Dillenburg on behalf of NOMR whose statutory address is 2173 East Warner Road, Suite 101, Tempe, AZ 85284. My phone is: 480-529-6441.

A handwritten signature in black ink, appearing to read "Rich Dillenburg", written in a cursive style.

Attachments A-J