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Working to protect and restore Western Watersheds and Wildlife

July 23, 2019

Sent this date via email:
comments-southwestrn-tonto-pleasantvalley@fs.fed.us
jtsturla@usda.gov

RE: Draft Environmental Assessment for the Proposed Bar X and Heber-Reno Sheep Driveway Grazing Authorization Project on the Tonto National Forest, Pleasant Valley Ranger District in Gila County, Arizona.

Dear Mr. Plain,

The following comments on the Bar X and Heber-Reno Sheep Driveway Grazing Authorization project Draft Environmental Assessment (EA) are being submitted on behalf of the staff and members of Western Watersheds Project who are concerned with the management of our public lands, and on behalf of the staff and members of Sierra Club – Grand Canyon Chapter.

As we said in our prior comments, in addition to being an inappropriate level of National Environmental Policy Act (NEPA) analysis for a project this size and in this particular area, the EA here is insufficiently critical of the need for livestock grazing in the Tonto National Forest within important habitat for wildlife species, especially bighorn sheep. Wildlife habitat is a precious resource on these allotments and this fact is not adequately considered nor are the impacts of grazing to wildlife habitat adequately analyzed. The alternatives do not adequately reflect the fact that livestock grazing on these allotments is not an activity the permittees are assured of engaging in.

It appears that our comments were disregarded entirely and we do not see any evidence that the Draft EA was modified in response to the over 170 comments received.[1] EA at 37. Therefore, we are including our prior comments in their entirety edited to reflect new page numbers from the Draft EA. We hope that our substantive, project specific comments will be reviewed and incorporated by someone at the Forest Service in order to ensure compliance with the National Environmental Policy Act (NEPA). We are especially concerned about the complete lack of information and analysis of the

[1] "No issues were identified that were within the scope of the comment solicitation and required other than mitigations or minor alterations in project design." EA at 37.

impacts of this project on bighorn sheep despite the fact that we did raise this issue in our prior comments.

We offer the following comments that supplement our prior comments, followed by our previous comments:

Failure to Use Relevant Information

We are deeply concerned about the failure to include relevant, site specific, agency prepared information that is relevant to this project.

Prior studies conducted by the Forest Service on the Bar X allotment indicate that livestock grazing will harm natural resources and will move ecosystems away from desired conditions. This will result in a violation of the Forest Plan and is a violation of NEPA. While the Forest Service includes a variety of studies from as far back as the 1920s, U.S. Forest Service studies conducted in the 1970s and 1980s on the Bar X allotment are mysteriously absent. The lack of these studies in the Draft EA are especially confusing because we are aware that the Forest Service was provided information about the importance and relevance of these studies to the current project analysis.

Therefore, we ask that the following studies be included in the project record and the information contained therein utilized to inform the analysis and decision-making process for this project:

Bar X Range Allotment Analysis (1978)
Environmental Analysis Report – Placement of the Bar X, Colcord, Young, and Haigler Creek Allotments under Management (1978)
Allotment Analysis Acreage and Grazing Capacity Summary
Bar X, Haigler Creek, and Young Allotment Management Plans (1981-1985)
Environmental Assessment (1985)
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 and 1978)

We are aware that these studies have been provided to the Forest Service by other commenters or are already in the possession of the Forest Service and therefore we are not submitting them again with our comments. Notably, these studies demonstrate that, in past decades, 468 cows severely degraded the natural resources in the project area. In the interim, drought and temperatures have increased, the number of roads in the project area have increased, and recreational uses have increased. The Forest Service must explain how exacerbated drought and climate conditions in the project area would facilitate an increase in the number of livestock while not further harming natural resources.

While WWP does not support any livestock grazing in the project area, the Forest Service must consider the following: Range science shows that to improve conditions in riparian and upland areas where livestock grazing is allowed, changes in management are necessary. These changes include setting stocking rates based on currently available preferred forage species and today's consumption

rates of livestock, enforcing utilization rates of less than 30% in upland and riparian areas, enforcing riparian stubble heights of > 15.2 cm across the aquatic influence zone and floodplain, enforcing bank alteration levels of < 20%, using riders to limit riparian use and distribute livestock, and providing rest, not deferment, so that sensitive native grasses recover vigor and productivity prior to being grazed again. Carter *et. al*, 2017.

Prior Comments

(Below we provide our prior comments with minor modifications to reflect Draft EA page numbers and new information.)

Purpose and Need

The stated purpose for this project is to "consider livestock grazing opportunities on public lands where consistent with management objectives[, and to] authorize livestock grazing in a manner consistent with direction to move ecosystems towards their desired conditions." EA at 35. This purpose and need statement preceded by the statement that "Completing this effort on time and to standard is essential…for the current allotment permittee's success and productivity[,]" and is followed by the statement that "[i]t is Forest Service policy to continue contributions to the economic and social well-being of people by providing opportunities for economic diversity and by promoting stability for communities that depend on range resources for their livelihood. (FSM 2202.1)." EA at 36. Herein lies the true purpose and "need" for this project – to ensure the economic livelihood of ranchers engaged in livestock grazing for profit on federal public lands.

Instead of using an EA to rubber stamp approval of livestock grazing in the Bar X allotment and through the Heber-Reno Sheep Driveway, the Forest Service should be engaged in the NEPA process *to determine whether or not to authorize livestock grazing* on these lands. While *where consistent* with other multiple use goals and objectives, there is Congressional intent to allow grazing on suitable lands, and while this allotment *may* contain lands identified as suitable for domestic livestock grazing in the existing 1986 Forest Plan, there is nothing in the regulations controlling livestock grazing on public lands that *requires* livestock grazing to be permitted. Furthermore, while "continued domestic livestock grazing is consistent with [the 1986 Forest Plan] goals, objectives, standards, and guidelines[,]" this Forest Plan is currently being revised and is woefully out of date. EA at 36.

Clearly, this project area is incredibly rich in natural and cultural resources and ecological diversity. It is especially important that the Forest Service make careful, thoughtful determinations regarding livestock grazing and the use of the sheep driveway at this time. The Forest Service's decision for this project must not include any actions that would conflict with grazing suitability determinations, impair Wilderness character, or preclude an area for recommended Wilderness in the forthcoming Forest Plan revision.

Importantly, and as acknowledged by the Forest Service, the "Congressional intent" to facilitate livestock grazing on federal lands must be consistent with other multiple use goals and objectives of other federal regulations, including the Multiple Use Sustained Yield Act of 1960, Wilderness Act of 1964, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976.

It is therefore important for the Forest Service to recognize that the need for this project should be to determine *whether or not* to continue livestock grazing on the allotment or through the sheep driveway and to do so only when it will not impair the productivity of federal public lands. It is not the job of the Forest Service to simply provide for livestock grazing on public lands because an application has been submitted or livestock permittee has economic interests in doing so. While the permittee may really want to continue grazing his livestock on federal public lands, they have no "right" to do so and the Forest Service is not required to allow livestock grazing on the allotment or through the sheep driveway without first determining whether doing so is appropriate in light of the ecological conditions on the ground.

We note that the need for the sheep driveway has not been established, and in fact is contradicted, in the EA. In the past decade, the sheep driveway has been requested for use at most four times per year at lower numbers than the 2011 FONSI authorization of 8,000 head, and the permittee has more commonly trucked their sheep to the summer grazing allotments. EA at 8. Given that the permittee appears to have a preference for trucking the sheep, there is no need to continue to authorize the sheep driveway and there is no rational explanation as to why cattle should be permitted to use this area either, given that they have only been occasionally using the driveway since 2010. EA at 10.

Therefore, we recommend the Forest Service revise the purpose and need for this project to reflect the true purpose and need, which is to determine whether livestock grazing and the use of the sheep driveway are appropriate in the project area. If the Forest Service properly frames the purpose and need for this project, the alternatives developed and the environmental analysis that flow from a hard look at the impacts of those alternatives will provide a more accurate picture of the impacts of livestock grazing on the lands managed by the Forest Service for the public.

The Range of Alternatives is Inadequate

For this project the Forest Service has identified a No Action – which would result in the canceling of the permit and no grazing on the allotment and would not permit cattle to graze in the sheep driveway but would continue to allow up to 8,000 sheep to use the driveway; and a Proposed Action – which increases the number of AUMs significantly, authorizes improvements, "conservation measures," and monitoring, and also allows the continued use of the driveway by sheep as well as cattle.

There is no alternative that would reduce the number of AUMs authorized on the allotment. There is no alternative that would eliminate the use of the driveway by sheep. The Forest Service must analyze at least one alternative that eliminates all livestock use of the driveway, including sheep use. The Forest Service must also analyze at least one alternative that reduces the number of AUMs for this project.

Need for an Environmental Impact Statement
[Flagging NEW CONTENT throughout this section]

The use of an EA for this project fails to comply with NEPA requirements. These allotments are adjacent to, or overlapping with, important areas such as the Hellsgate Wilderness Area, habitat for threatened and endangered species such as the Chiricahua leopard frog, the narrow-headed garter snake, the Mexican spotted owl, and the Mexican gray wolf.

These two projects would authorize livestock grazing on 27,423 acres over 23 pastures in Gila County. EA at 6. The Heber-Reno Driveway portion of the project covers 33,780 acres, 26 linear miles. EA at 7. While livestock grazing has been allowed in this area since 1973 under one term grazing permit, it has averaged just 3,707 AUMs per year between 2007 and 2018. EA at 8. The proposed action would dramatically increase the number of AUMs to between 4,002 and 9,250 AUMs. EA at 38.

The proximity to and overlap with specially designated areas require a higher level of analysis in light of the intensity and context of this specific project. Similarly, the presence of threatened and endangered species and designated critical habitat covering vast swaths of the project area raise the level of analysis necessary to ensure compliance with federal regulations. *See* 40 C.F.R. §§ 1508.27(a) (context), b (intensity)). In assessing "context," agencies must look at different geographic scales and the short- and long-term impacts of the proposed action within those different geographic scales (40 C.F.R. § 1508.27(a)). In assessing "intensity," agencies must look at the severity of the impact based on several factors:

> 1. The fact that impacts "may be both beneficial and adverse" and that "[a] significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial." 40 C.F.R § 1508.27b(1).
>
> > For all allotments in the project area, and from our review of the EA, there appear to be significant long-term negative impacts associated with livestock grazing that have been minimized in the analysis, resulting in an inadequate analysis of the intensity of these impacts to threatened and endangered species as well as specially designated areas.
> >
> > For example, nearly the entire area is composed of watersheds that are Functioning at Risk while the rest of the area is Impaired. EA at 24-25.

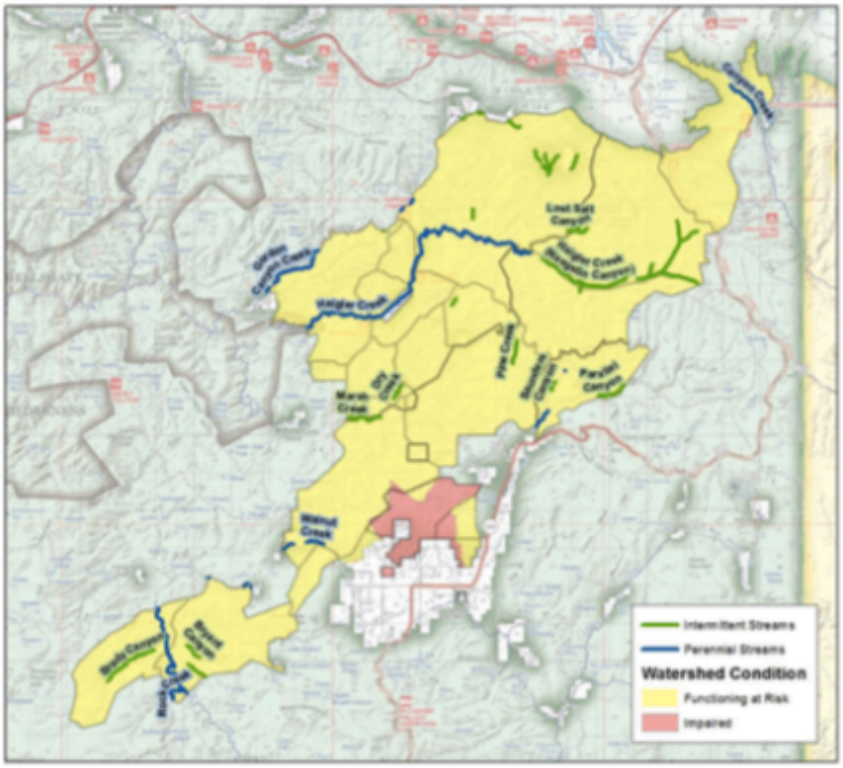

Figure 7: Bar X and Driveway Watershed Condition Class with Perennial and Intermittent Streams

Table 8: Watersheds Condition and Percent of Watershed within the Project Area

Name	Acres in Project Area	% of Total Project Area	Overall Watershed Condition
Haigler Creek	22,989	37	Functioning at Risk
Marsh Creek	13,930	23	Functioning at Risk
Middle Spring Creek	6,480	10	Functioning at Risk
Gruwell Canyon – Cherry Creek	4,713	8	Functioning at Risk
Canyon Creek Headwaters	4,005	6	Functioning at Risk
Gordon Canyon	3,894	6	Functioning at Risk
Walnut Creek	3,293	5	Functioning at Risk
Pleasant Valley	2,075	3	Impaired Function
Parallel Canyon – Cherry Creek	338	1	Functioning at Risk
Rock Creek	70	0	Functioning at Risk
Upper Spring Creek	59	0	Functioning at Risk

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The 1986 Forest Plan for the Tonto National Forest requires that watersheds should only support multiple uses such as livestock grazing when there is no long-term decline in ecological conditions and when they provide high-quality water for downstream communities dependent on them. EA at 26. Here, the Forest Service is proposing to increase livestock grazing in watersheds that are already degraded in violation of the Forest Plan Desired Conditions. This is especially curious when the attributes most frequently assessed that contribute to watershed condition ratings of other than properly functioning include road maintenance, aquatic invasive species, riparian vegetation condition, road density and proximity to water, soil condition, and loss of forest cover and can largely be attributed to the negative impacts associated with livestock grazing. See Appendix E, previously submitted.

Increasing the number of AUMs for the project area as well as adding livestock to the sheep driveway will further degrade the watersheds in the project area. Degrading these important watersheds is a significant effect that must be analyzed in an EIS, precluding a Finding of No Significant Impact.

2. "The degree to which the proposed action affects public health and safety." 40 C.F.R § 1508.27b (2).

This issue has not been addressed in the EA at all. Water quality impacts from *E. coli* haven't been adequately disclosed as they relate to livestock grazing, nor have air quality issues been addressed.

Specific to water quality and public health, the Forest Service includes Table 10: Water Quality Status of Streams Within or Just Below Analysis Area. EA at 27. For the Cherry Creek stream reach the Arizona Department of Environmental Quality (ADEQ) notes that "full body contact" (e.g., swimming) is an "inconclusive use" "due to an exceedance of *E. coli* and lead" and phosphorus. EA at 27. Haigler Creek also has an "inclusive use" due to an *E. coli* exceedance. Bacterial, lead, and phosphorus contamination of streams used recreationally is a serious health concern that the Forest Service has not addressed other than to indicate that "more samples are needed." EA at 27. The Forest Service must disclose to the public the likelihood that livestock grazing in and around Cherry Creek and Haigler Creek are contributing to the *E. coli* and phosphorus contamination and how these contaminants impact the health of the public using these stream reaches. For Canyon Creek, coldwater aquatic and wildlife uses are not attained due to high levels of dissolved cadmium. There is no information regarding the source of this cadmium. The Forest Service must disclose whether this contaminant is related to upland livestock uses and the erosion associated with that use.

Additionally, there is a general lack of information regarding all of the stream reaches within the project area. Marsh Creek, Colcord Canyon, Allenbaugh Spring, Cherry Creek, Saunders Canyon, Walnut Creek are identified as "key reaches" but there is insufficient information to determine if there are other stream reaches within the allotment that the public might use for recreation.

For air quality, the Forest Service has finally addressed this issue, but inadequately. In our prior comments we recommended that the impacts of livestock use at the currently authorized level on air quality be assessed and strongly recommended that the use of the sheep driveway by 8,000 domestic sheep and any number of cattle proposed for authorized use of the driveway also be evaluated for impacts to air quality (e.g., dust/particulates).

The Forest Service has acknowledged that livestock can impact air quality, but apparently only "during activities associated with livestock grazing management." EA at 141. The Forest Service has then stated, without support in the record, that "[e]ffects can be mitigated through proper site preparation and construction techniques and site

restoration following ground disturbing activities." EA at 141. For analysis of the tens of thousands of acres disturbed by hoof action, wallowing, and other direct livestock activities, the Forest Service declines to analyze the air quality impacts because "the amounts would be small and difficult to determine from the total particulates generated by the use of unpaved roads by passenger vehicles, road maintenance and other off-road vehicles and recreation activities in the project area." EA at 141. The complete analysis of the impacts of this project on air quality is contained in a single sentence: "Alternative B is expected to have minimal effect on air quality in the project area." EA at 141.

Thus, the Forest Service sweeps the impacts of livestock grazing on air quality under the NEPA rug, artificially minimizing the impacts of this pervasive activity in the project area, in violation of NEPA.

3. "Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas." 40 C.F.R § 1508.27b (3).

The EA fails to disclose this information, especially concerning the impacts of livestock movement and activities on cultural resources.

4. "The degree to which the effects on the quality of the human environment are likely to be highly controversial." 40 C.F.R § 1508.27b (4).

Unfortunately, the environmental impacts associated with livestock grazing are not scientifically controversial because they are well studied and the impacts are well-known to be highly detrimental to wildlife and watersheds.[2] However, livestock grazing on federal public lands is a highly controversial issue, especially in recent years with ranchers taking over a wildlife refuge in Oregon, failing to remove their errant livestock from federal public lands in Arizona and Utah, among other states, and with livestock ranching "advocates" threatening violence against federal employees for trying to enforce livestock grazing regulations designed to protect those federal lands. In areas where Mexican gray wolf reintroductions have occurred or where the wolves are likely to be found, livestock grazing is even more controversial because grave concessions to livestock ranchers are often made to the detriment of the wolf. This controversy over how federal public lands should be used and managed has not been addressed in the EA.

Below, we provide an extensive discussion regarding the negative impacts to bighorn sheep, which has not even been identified as an issue in this EA. While we suspect this could be a simple oversight, it is important to note here that information regarding the sheep driveway's impacts on bighorn sheep was discussed in the 2011 EA for the driveway. That 2011 EA included maps showing the overlap between the sheep driveway and bighorn sheep habitat, possible mitigation and avoidance measures, and information on future Arizona Game and Fish Department actions involving bighorn sheep. For the current EA, it appears as if the Forest Service no longer recognizes the

[2] Fleischner, T.L. 1994.

potential for significant negative effects to bighorn sheep. There is no analysis of how the use of the sheep driveway by cattle will displace domestic sheep and potentially harm bighorn sheep, there is no alternative that precludes the use of the driveway by all livestock, including domestic sheep, and there is not adequate acknowledgment that the sheep driveway has not been utilized as intended for domestic sheep (the permittee "more commonly" uses trucks to move his sheep, EA at 10, 38). Clearly, there is a discrepancy within the agency regarding this issue and an apparent internal controversy over even discussing this issue at this time.

5. "The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks." 40 C.F.R § 1508.27b (5).

For impacts to soils in the project area, including the Bar X allotment and the sheep driveway, the Forest Service has provided the public with data from 2011 in the form of two tables (Tables 3 and 4) on page 13 and 14 of the Preliminary EA. Unfortunately, as we noted in our prior comments, this data is 1) outdated, and 2) filled with data gaps. In the Draft EA these tables have been modified to remove the reference to the 2011 date and the pastures without data have been removed. This is misleading and while the Forest Service admits that "limited on-site data is available[,]" the Forest Service then makes an assumption regarding the condition of soils where data is missing by projecting "from similar sites across the landscape and based on theoretical approaches and methods generally accepted in the scientific community." EA at 21. However, those approaches and methods are not disclosed or cited and therefore the public has no way to verify whether the Forest Service has conducted an appropriate analysis.

Nearly half of the 33,774 acres analyzed for soil condition of the sheep driveway remain unassessed. Two pastures (Potato Butte and Walnut) have no acres assessed and two pastures (Cline Mesa and McInturff) have just a small percentage of the acres assessed. The Forest Service must acknowledge that the impacts to soils on nearly half of the project area are uncertain and/or unknown. Given that the Tonto National Forest was established to provide water for nearby cities and towns, the protection of the soils and watersheds is of paramount importance.

The tables below show an evaluation of soil condition data collected on the Bar X and Driveway in 2011.

Table 3: Driveway Soil Condition by Acre

Pasture	Satisfactory	Impaired	Impaired - Unsatisfactory	Satisfactory-Impaired	Satisfactory-Unstable	No Condition Assessed	Analyzed	Total
Brady Canyon	No Data	No Data	No Data	No Data	1366	1571	1366	2937
Cline Mesa	No Data	No Data	No Data	No Data	624	3450	624	4074
Lost Salt	5227	336	No Data	No Data	1425	No Data	6988	6988
McInturff	74	No Data	161	21	500	4476	756	5232
Naegelin	3499	40	No Data	178	757	No Data	4474	4474
Potato Butte	No Data	No Data	No Data	No Data	No Data	637	0	637
Valentine	4128	45	No Data	No Data	61	No Data	4234	4234
Walnut	No Data	No Data	No Data	No Data	No Data	5198	0	5198
Total	12928	421	161	199	4733	15332	18442	33774

Table 4: Bar X Soil Condition by Acre

Pasture	Satisfactory	Impaired	Impaired - Unsatisfactory	Satisfactory - Impaired	Satisfactory - Unstable	No Condition Assessed	Analyzed	Total
Bar X	487		156	No Data	44	No Data	687	687
Colcord	8540	36		No Data	2325	No Data	10901	10901
Cross Y	507		95	No Data	94	No Data	696	696
Glasscock	No Data	No Data	No Data	No Data	No Data	145	0	145
Grasshopper	21		17	No Data	No Data	1070	38	1108
Haigler	54		22	No Data	953	150	1029	1179
Heifer	No Data	No Data	No Data	No Data	No Data	68	0	68
Horse	No Data	No Data	No Data	No Data	No Data	97	0	97
Hospital	No Data	No Data	No Data	No Data	No Data	48	0	48
House	No Data	No Data	No Data	No Data	No Data	60	0	60
Lower Dry Creek	No Data	No Data	No Data	No Data	No Data	1401	0	1401
Mare	No Data	No Data	No Data	No Data	No Data	63	0	63
Oxbow	358	No Data	147	68	1294	1231	1867	3098
Pine	No Data	No Data	No Data	No Data	No Data	196	0	196
Roscoe	No Data	No Data	No Data	No Data	No Data	0	0	0
Round Mountain	314	No Data	94	0	1592	468	2000	2468
Steer	No Data	No Data	No Data	No Data	No Data	582	0	582
Upper Dry Creek	589	No Data	101	No Data	458	289	1148	1437
Westhole	57	No Data	39	No Data	243	843	339	1182
Windmill	No Data	No Data	No Data	No Data	No Data	1774	0	1774
Total	10927	36	671	68	7003	8485	18705	27190

The large data gaps and antiquated data have created the uncertain and unknown impacts of this project which now require an EIS and preclude a Finding of No Significant Impact. However, this acknowledgment of the missing data has been removed from the Draft EA and the two tables above no longer exist.

As we noted in our prior comments, Table 4 from the Preliminary EA did not provide any additional level of certainty. Over 30% of the Bar X allotment remains unassessed. Ten pastures (Glasscock, Heifer, Horse, Hospital, House, Lower Dry Creek, Mare, Pine, Steer, and Windmill) have not been assessed at all and several pastures (Grasshopper, Oxbow, and Westhole) are largely un-assessed. Even worse, this data has been conflated with the Bar X pastures in Table 5 of the Draft EA (at page 18), providing a misleading picture of the known conditions for soils in the project area. Of the 11 pastures described in Table 5, 5 are classified in "poor" condition for soil productivity and erosion, 6 are in "fair" condition. EA at 18. However, all pastures are reported to be in "good" condition for soil contamination and apparently these two conditions are

combined to assess overall soil condition, which for 10 of the 11 pastures analyzed mysteriously becomes "fair" while only one is in "poor" condition. It is unclear why some pastures combine a "poor" and a "fair" condition to become a "fair" condition while one remains "poor." This assessment seems arbitrary and does not provide the public with sufficient information to determine whether the analysis is appropriate. Further confusing the analysis, Table 6 indicates that 4 pastures are in "poor" condition, 2 are classified as "good," and 5 pastures are in "fair" condition. EA at 21. The analysis is arbitrary, contradictory, and confusing.

6. "The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration." 40 C.F.R § 1508.27b (6).

The authorization of livestock grazing by federal land managers does appear to ensure that future livestock grazing will continue, even when doing so is outside the law and regulations the agency is bound to follow.

Furthermore, public lands ranching provides an economic boon to livestock operators and entrenches the concept of welfare ranching, which is made explicit in the Preliminary EA as we noted with the problematic "purpose and need" statements.

Because the Tonto National Forest is in the midst of revising the 1985 Forest Plan, decisions made for this project must not foreclose management decisions that are yet to be made to update this 34-year-old plan. In the Preliminary Proposed Plan, the Forest Service makes clear that permits and authorizations for domestic sheep uses should not imperil bighorn sheep:

> Efforts (e.g., coordination with permitees, temporary fencing, increased herding, and herding dogs) should be made to prevent transfer of disease from domestic sheep and goats to bighorn sheep wherever bighorn sheep occur. Permit conversions to domestic sheep or goats should not be allowed in areas adjacent to or inhabited by bighorn sheep.

See Tonto National Forest Preliminary Proposed Land and Resource Management Plan at 61.

Do any of the proposed decisions in this project preclude any Wild and Scenic River designations moving forward? This information must be disclosed and if the answer is yes, this would preclude a Finding of No Significant Impact.

7. "Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts." 40 C.F.R § 1508.27b (7).

The Forest Service's usual policy of authorizing livestock grazing on an allotment-by-allotment basis using EAs is a clear example of breaking down an action into small parts or determining it is temporary in order to render the impacts individually insignificant. Here, the Forest Service is combining the significant negative impacts of a sheep driveway authorized through key habitat for bighorn sheep as part of the same project that will authorize livestock grazing in an ecologically sensitive area.

Because livestock grazing occurs on multiple allotments covering generations of livestock ranchers and is authorized on a decade-by-decade system, the Forest Service has an obligation to analyze the impacts of livestock grazing on each allotment, to look at those impacts holistically to identify, disclose, and allow public comment upon, the actual, widespread, long-term, and significant impacts livestock grazing has on lands management by federal agencies for the public.

The cumulative impacts associated with the unauthorized and/or illegal actions of government officials and/or permittees or landowners in and around the project area have not been disclosed at all, though they are documented in court records. As the Tonto National Forest staff is aware, litigation was initiated on April 11, 2018, by Neighbors of the Mogollon Rim, Inc. The complaint outlines the history of grazing impacts on the allotment that resulted in the closure of specific areas to livestock grazing in 1979, then the Forest Service's decision to allow livestock grazing on this closed area without NEPA analysis in 2015 and again in 2018 despite complaints about the damage to natural resources the livestock grazing was causing. *See* Appendix A, complaint filed by Neighbors of the Mogollon Rim, Inc, April 11, 2018 at 2. The Forest Service also, according to the complaint, inappropriately increased the number of AUMs on the allotment in violation of direction in the Forest Plan, the Allotment Management Plan, and the permit and, again, without any NEPA process or public oversight. The complaint alleges that the Forest Service violated the Federal Land Policy and Management Act (FLPMA), the National Forest Management Act (NFMA), and NEPA. A settlement was agreed to and the litigation was dismissed in October of 2018 and that settlement indicates that the Forest Service amended the 2018 Annual Operating Instructions for the Bar X Allotment to remove Turkey/Colcord pastures from authorized use and reduced the total AUMs to reflect the AUMs authorized in the term grazing permit. *See* Appendix B, Mogollon Rim Settlement dated October 11, 2018, at 2.

The Forest Service must address the cumulative impacts of unauthorized grazing by permittees as well. In 2016, the Government Accounting Office identified actions needed by federal agencies to improve the tracking and deterrence efforts on this front. *See* Appendix C, GAO Report to the Committee on Natural Resources, House of Representatives: Unauthorized Grazing: Actions Needed to Improve Tracking and Deterrence Efforts. This 2016 GAO report found that the frequency and extent of unauthorized livestock grazing on Forest Service lands is largely unknown because agencies "prefer to handle most incidents informally" with a phone call and these violations of law are not recorded, and yet despite this vast underreporting of livestock

grazing violations the report indicates 1,500 incidents of unauthorized grazing where formal action was taken between 2010 and 2014, with more than 600 incidents reported on Forest Service lands and a large number of those occurring in Region 3. 2016 GAO report at 1, 57-58. With this information in mind, the Forest Service should, for this project, disclose the level of unauthorized grazing that has occurred on this allotment over the past 10 years, including incidents that were handled "informally," including willful and non-willful incidents. The cumulative impact of unauthorized livestock grazing is undisclosed in this EA and this deficiency must be corrected.

Additionally, the EA here fails to disclose past livestock fencing, water and other infrastructure projects that have altered the landscape and changed the way wildlife are able to move about the project area. This information must be disclosed in a revised draft EA and the public must be allowed to review and comment upon those revisions.

The Forest Service must disclose the cumulative impacts of the following projects in the project area (all of which have been authorized using Categorical Exclusions over the past 8 years) and explain how this does not violate NEPA prohibition on breaking a project down into small parts to avoid adequate NEPA analysis:

- 2011 Naegelin Canyon Fence
- 2011 Pipeline Extensions
- 2012 Upper Pasture Trick Tank
- 2012 Upper Dry Creek Pasture Trick Tank and the related (and new) Cross Y II pasture that was created on the south side of Haigler Creek
- 2015 Pine Creek Well Pipeline/Drinker
- 2015 Bar X Tanks creating seven new tanks in the Naegelin and Lost Salt Pastures, signed but undated Categorical Exclusion Decision Memo
- 2016 Bluebird, Powerline, and Sterile Tanks project in the Lost Salt pasture

Finally, domestic sheep (8,000 head) were authorized to use the sheep driveway twice annually using a FONSI in 2011. EA at 9. This was an inappropriate use of a FONSI at the time given the significant impacts to bighorn sheep populations, as well as the potential conflicts with other users and a failure to analyze impacts to the Mexican gray wolf. These impacts were not analyzed in 2011, and are not analyzed in this EA. This has resulted in a significant NEPA deficiency and, for all of the foregoing reasons, a FONSI is precluded for this project and an EIS must be prepared based on just the factor of cumulative impacts.

8. "The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources." 40 C.F.R § 1508.27b (8).

There is insufficient information regarding any historic or culturally significant structures or objects in the project area found in the EA.

This is a significant oversight that must be remedied. The area has been used by humans since the Archaic Period and there are at least 205 archaeological sites located within the Heber-Reno sheep driveway, though the EA indicates that the "Heber-Reno Sheep Driveway encompasses an area which has had very little formal archaeological investigation. EA at 135. There are historic habitat structures, roomblocks, storage caves, petroglyphs, artifact scatters, homestead remains, log cabins, pictograph sites, Basque "stone boys" and more, all located within the sheep driveway. These important cultural resources are not identified while the "historic" nature of the sheep driveway itself is emphasized and described at length. EA at 135.

The Forest Service has documented that livestock have direct and indirect impacts on cultural and historic sites, yet has failed to adequately address these impacts in the current EA.

Because the project area is rich with archaeological, historic, and cultural sites, the use of an EA is inappropriate. Because the current EA dismisses the importance of these sites and because the public has not had an opportunity to review and comment on this project in light of the existence of those sites, the Forest Service cannot proceed, must revise the current environmental analysis, and allow another opportunity for review and comment.

9. "The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973." 40 C.F.R § 1508.27b (9).

The U.S. Fish and Wildlife Service has identified livestock grazing as having significant impacts on listed species and even identified livestock grazing as a potential cause for the need to list species. There are several federally listed threatened or endangered species within this project area. The EA minimizes the impacts of livestock grazing on these species and fails to adequately address the significance of the existence of these species and their habitat in the project area.

In light of the well-documented ongoing inability of livestock operators and Forest Service personnel to prevent trespass livestock in riparian areas with the project area, the Forest Service cannot rely upon "well managed" livestock operations to artificially minimize the impacts of this project.

The Forest Service has failed to acknowledge the existence of the Mexican gray wolf in the project area in this EA.[3] This significant oversight must be corrected. The presence of this species, in addition to the Mexican spotted owl, the Southwestern willow flycatcher, and the narrow-headed garter snake in the project area elevate the significance of this project considerably, precluding a Finding of No Significant Impact.

[3] WWP addresses this issue more fully below.

10. "Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." 40 C.F.R § 1508.27b (10).

There are issues with trespass/errant livestock on this allotment.[4] This information is not adequately disclosed in the EA, but the Forest Service is aware of this information as evidenced by documents related to recent litigation. Because trespass livestock are not adequately disclosed or discussed in the EA, the public is not able to review or comment upon violations of the grazing permits, nor on potential Wilderness Act, NEPA, FLMPA, or other violations related to trespass livestock.

The Forest Service has failed to disclose information regarding competition between livestock and ungulates for the project area. The Forest Service has acknowledged this conflict in the past and has not provided any rationale for why this information and this conflict has been ignored in the current EA.

In 1981, the Forest Service determined that livestock were having a significant enough impact on natural resources that the area should be protected from livestock grazing. This information is not adequately described in the current EA and in fact is simply mentioned at page 8. It is extremely unclear from the information in the EA why the Forest Service thinks that adding *more* livestock to an area that is experiencing *more* drought than past decades is an appropriate decision given the clear and present dangers climate change and drought pose to our natural resources.

Despite the fact that Haigler Creek is Functioning at Risk, the Forest Service proposed to allow livestock to this area, which was previously closed to livestock grazing. There is no rationale in the EA explaining how a riparian area or watershed that is Functioning at Risk without livestock will improve condition with the addition of livestock. This is perhaps because there is no scientific support for such a rationale.

As we note above, the sheer scope of this project clearly precludes the use of an EA and there are many reasons that a Finding of No Significant Impact is inappropriate.

Bighorn Sheep

Bighorn sheep are native to Arizona, and occupied and suitable unoccupied bighorn sheep habitat is found throughout the Tonto National Forest, including along the Heber-Reno stock driveway. Use of the driveway by domestic sheep puts bighorn populations at risk of decline or extirpation due to pneumonia, keratoconjunctivitis, and contagious ecthyma, and precludes the reestablishment of bighorn sheep to suitable habitat along the route. The proposed cattle use of the stock driveway may lead to increased straying of domestic sheep due to forage limitations, thereby increasing the risk to bighorn sheep.

Domestic sheep are known to carry several species of bacteria that cause fatal pneumonia in bighorn sheep. These pathogens, which include Mycoplasma ovipneumoniae, Bibersteinia trehalosi,

[4] *See* Mogollon Rim Inc., 2018 complaint and settlement documents.

and Mannheimia haemolytica, are carried asymptomatically by domestic sheep, and can be transmitted to wild bighorn sheep when the species are in close proximity. Mycoplasma ovipneumoniae occurs in approximately 80% of domestic sheep, and multiple strains of Mycoplasma ovipneumoniae occur within a single domestic sheep flock. Bighorn sheep show only strain-specific immunity to rapidly-mutating mycoplasma species, so bighorn herds previously affected by one strain will undergo a disease response equivalent to that of naive sheep when challenged with a new strain. There is no effective treatment or vaccine for pneumonia in bighorn sheep.

When passed to bighorn sheep, Mycoplasma-induced respiratory disease results in acute morbidity, and can cause immediate die-offs of affected bighorn sheep populations. Mortality rates of up to 90% are commonly observed in all age classes. Fever, runny nose, and prolonged coughing are symptoms of bacterial pneumonia in bighorn sheep, and these both precede and accompany severe lethargy and muscle weakness. As the infection progresses, accumulated mucus in the affected sheep's respiratory tract will cause the animal to effectively drown in phlegm, leading to a slow and painful death. Some bighorn sheep may survive and recover from bacterial pneumonia, but it takes a minimum of several years for an infection to be fully cleared from an individual or population. The presence of sinus tumors, which are caused by a transmissible virus, results in the ongoing expression of mucus containing respiratory pathogens in some bighorn sheep. These animals, known as "supershedders", are more likely to transmit pneumonia to other bighorn sheep, and may be capable of carrying and transmitting the bacteria for much longer periods.

Surviving bighorn sheep with and without sinus tumors become carriers of the infectious pathogens, and may transmit them to neighboring populations. Thus, a single contact between a bighorn sheep and a domestic sheep may lead to a domino effect whereby multiple bighorn populations are affected over the course of months to a few years. Surviving bighorn ewes also pass the pathogens to their offspring. Lambs born to survivors of pneumonia epizootics often do not live past the weaning period, as they lose immunity conferred by antibodies in their mothers' milk. This effect is typically observed for a period of 3 or more years, and some populations continue to show limited lamb recruitment for one to two decades following an initial disease outbreak. Consequent drops in recruitment over the course of several to many years cause bighorn population numbers to decline substantially even after the initial disease response has ceased, and herds may fall to numbers below those necessary for recovery and long-term persistence. As remaining adults age and senesce, herd numbers may decline to the point of total loss of a bighorn population.

Pneumonia-related die-offs continue to hamstring bighorn recovery Westwide, limiting both population growth and range expansion in all Western states. When die-offs occur, state wildlife agencies may intervene to euthanize affected bighorn sheep to limit undue suffering and to prevent further spread of disease, a costly and potentially hazardous exercise which is only effective if all bighorn sheep in a wild population are eliminated. Total depopulation of bighorn sheep habitats has occurred in several states in recent years. In most of those cases, bighorn sheep were not reintroduced to areas where herds were removed even after several years, due to the persistent threat from domestic sheep remaining on the landscape. These ongoing losses of suitable habitat areas, coupled with losses associated with the initial decimation of the West's bighorn populations and the continued presence of domestic sheep on public and private lands, result in a much reduced distribution of suitable secure habitat throughout the species' range.

With both disease-induced die-offs and artificial depopulation of bighorn herds, unique genetic material found in populations which have evolved for millennia is forever lost. Because bighorn sheep declines of approximately 98% occurred during the era of Westward Euro-American expansion, dramatic genetic losses have already occurred over the last century. Further losses of local adaptations and of genetic diversity within herds will likely contribute to reduced fitness and reduced adaptability in the face of stochastic disturbance and climate change. An unpublished study from Idaho showed drastic declines in genetic diversity within and among central Idaho herds which have been affected by livestock diseases, but which have never been fully extirpated, demonstrating the necessity of preserving remaining bighorn populations in their entirety to prevent losses of critical genes within discrete herds and within the species as a whole.

Domestic sheep carry other pathogens that affect bighorn sheep. Mycoplasma conjunctivae and chlamydophila spp. carried by domestic sheep have been implicated in outbreaks of infectious keratoconjunctivitis in bighorn sheep, where wild bighorns have been temporarily blinded and left vulnerable to predation and fatal falls. Contagious ecthyma likewise affects bighorn sheep. This livestock virus causes lesions on the skin and mouth that may limit a bighorn sheep's ability to feed, leading to malnutrition and potential starvation. While rarely fatal in itself, parapoxvirus, the cause of contagious ecthyma, may weaken the immune system of an affected animal, leaving it vulnerable to secondary infections. As with contagious pneumonia, state agencies, including the Arizona Game and Fish Department, have killed bighorn sheep for contracting keratoconjunctivitis and contagious ecthyma from domestic sheep.

Telemetry and observation records reveal bighorn sheep do not show exclusive home range fidelity. Instead, they engage in long range exploratory movements called forays which commonly span 15 miles or more, but can include much longer distances. Bighorn sheep are attracted to domestic sheep due to their close relation and gregarious nature, and will seek out domestic sheep when both occur on the landscape. As a result of this unique behavior characteristic, simple spatial separation by a few miles is not effective in eliminating the risk to bighorn sheep where domestic sheep occur.

Domestic sheep are also prone to wandering, and straying is a common occurrence when large bands are grazed on Western landscapes. Domestic sheep may wander alone or in groups for a year or more when separated from the main band, and they will likewise seek out bighorn sheep for companionship or mating. Stray domestic sheep often go unnoticed, or are assumed to have been killed by predators, and domestic sheep may be difficult to recapture or otherwise remove even when they are detected. Commingling of stray domestic sheep and wild bighorn sheep has led to die-offs of bighorn sheep, including in areas many miles from the location where domestic sheep were lost. The trailing of domestic sheep over vast distances increases the likelihood of straying.

The presence of the Heber-Reno stock driveway not only puts bighorn sheep at risk of disease caused by livestock pathogens, it also limits the potential expansion of extant populations and prevents transplants to suitable habitat from which bighorn sheep have been extirpated. The Arizona Game and Fish Department has already terminated efforts to reintroduce wild bighorn into Forest Service lands where there are domestic sheep, including in the Long Tom Allotment, the endpoint of the Heber-Reno driveway. While bighorn sheep Westwide are geographically limited due to the presence of domestic sheep and goats on private lands, commercial and residential development, recreation, and transportation infrastructure, most bighorn sheep habitat occurs on federal lands, where impacts can be

mitigated through sound management practices and limitations on travel and development. The discontinuation of grazing activities which serve as landscape sinks on federal lands has the greatest potential of any possible action to contribute to the recovery of the species. Maintenance of sheep grazing on federal lands, by contrast, continues to erode remaining populations and threatens the genetic diversity of the species. The cumulative effects of domestic sheep grazing on Western public lands include severe limitations on bighorn sheep recovery and range expansion.

We provide references for the foregoing in the references section and have attached all of the references used as Appendix D.

The Forest Service must analyze the habitat potential of the area of the forest made unavailable for bighorn sheep due to the presence of domestic sheep, and should include project alternatives that restore suitable habitat for bighorn sheep. This analysis must include the displacement of domestic sheep due to the presence of cattle in the driveway. The Forest Service cannot simply analyze the quantitative risk from a small section of the sheep driveway because that ignores the cumulative impacts. This is especially important for the southern end of the driveway. For the Forest Service to analyze this section of the driveway in a vacuum it must intentionally ignore the biggest issue which is that the use of the driveway by livestock (sheep *and* cattle) prevents the recolonization of and translocations to otherwise suitable unoccupied habitat by bighorn sheep.

We have identified the following issues related to the use of the driveway by sheep that the Forest Service must analyze for this project:

- What are the economic impacts of the use of the driveway by sheep and cattle to recreational interests such as hunting, hiking, backpacking, camping?
- How does the use of the driveway by domestic sheep and/or the displacement of domestic sheep by cattle use of the driveway affect the Arizona Game and Fish Department's long-standing sheep restoration/relocation project?
- How many times has the sheep driveway been utilized (by domestic sheep) in the past 20 years? Please provide information regarding how much the permitee(s) paid for forage use.
- What is the justification for continuing to utilized the sheep driveway for moving domestic sheep given how infrequently it has been utilized in the past, including the recent past, and in light of the known significant impacts to bighorn sheep?
- Please provide any and all known information regarding the presence of Rocky Mountain bighorn sheep in and around the project area. If the Forest Service does not at this time have this information, please ensure that this information is requested from the Arizona Game and Fish Department and that the impacts of livestock use of the driveway to this species is analyzed.
- Please provide any and all information the Forest Service has regarding stray or unauthorized domestic sheep within the project area and within a 50-mile radius.

Violations of the Endangered Species Act

If the Forest Service proceeds with this project as described, WWP is certain there will be violations of the Endangered Species Act. The current EA references the 2008 Biological Opinion/consultation letter the Forest Service received from the U.S. Fish and Wildlife Service that includes analysis of impacts on the Bar X allotment. The Forest Service appears to have overlooked the fact that the consultation letter indicates the Forest Service achieved compliance with the Endangered Species Act by promising not to graze the Colcord allotment, and yet here the plan is to reverse that promise.

Chiricahua Leopard Frog

The EA for this project contains no analysis of the impacts of the project to the Chiricahua leopard frog. The Forest Service cannot rely upon the 2008 Biological Opinion to sweep the impacts of this project on this species under the rug. It is found in central and southeastern Arizona and in west-central and southwestern New Mexico. Chiricahua leopard frogs are habitat generalists that can adapt to a variety of wetland situations. Their habitat includes lakes, rivers, streams, springs, ponds, and man-made structures such as reservoirs, stock tanks, and acequias. This frog is documented at elevations of 1,000-2,710 m (3,281-8,890 ft). The species uses permanent or nearly permanent pools and ponds for breeding and most sites that support populations of this frog will hold water yearlong in most years. The frog is rarely found in aquatic sites inhabited by non-native fish, bullfrogs, or crayfish, although in complex systems or large aquatic sites, this species may occur in the presence of low densities of non-native predators. Recovery Units for this species have been established, but the EA for this project does not disclose whether or not this project occurs in or near any Recovery Units for the species.

Potential habitat does exist in the sheep driveway area (1,929 acres) and sheep are known to visit 4 watering areas within this species' habitat: Unnamed Tank, Clay Springs Tank, Naeglin Canyon Watering Site, and Trick Tank. The closest known breeding site the Heber-Reno driveway is Cherry Creek. The Cherry Creek breeding CLF population is 3.4 miles downstream through an intermittent and perennial stream, and 2.25 miles upstream through an intermittent stream from the sheep driveway. This EA fails to disclose this information, fails to analyze the impacts of adding cattle to the driveway, and fails to analyze the impacts of removing sheep from the driveway.

These oversights must be corrected and the public must be provided an opportunity to review and comment upon this issue.

Mexican Spotted Owl

Range for the Mexican spotted owl (MSO) extends from southern Utah and central Colorado south through the mountainous regions of the Southwest, including Arizona. Many populations occur in relatively isolated mountain ranges, sometimes separated by large expanses of non- forested habitats. There are 6,567 acres of critical habitat on the Tonto National Forest.

The Forest Service may not rely upon the 2008 Biological Assessment to minimize or ignore the impacts of this project on the Mexican spotted owl. This assessment is outdated and fails to account for recent climatic changes. Furthermore, there appears to be no analysis of the impacts of this project on the MSO and this oversight must be corrected. Does the sheep driveway overlap or is it in

proximity to any designated critical habitat or PACs for the MSO? How will the addition of cattle to the driveway impact this species? The public must be provided an opportunity to review and comment upon that analysis.

Narrow Headed Garter Snake

The narrow-headed gartersnake was listed as threatened on July 8, 2014 (79 FR 38678). Critical habitat was proposed on July 10, 2013 (78 FR 41550) and a final critical habitat rule is expected in the future.

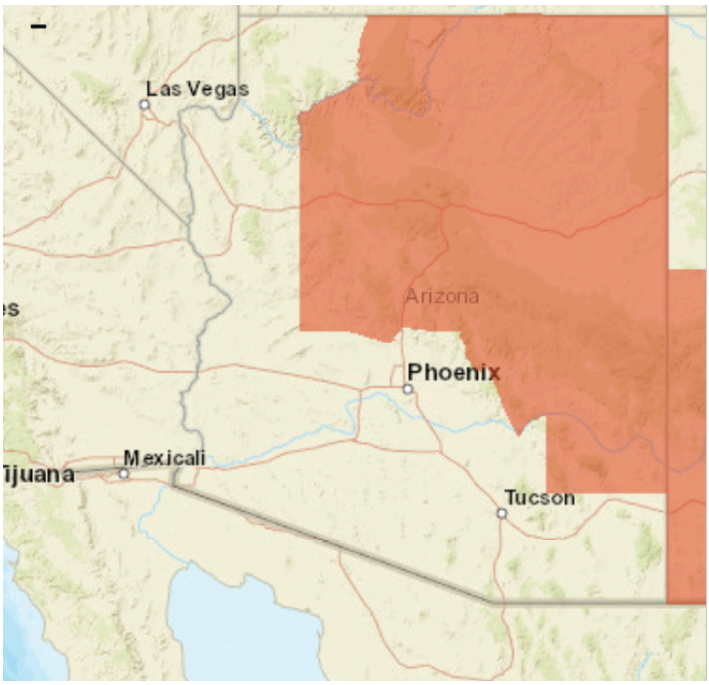
As the BLM is aware,

> [T]he narrow-headed gartersnake is distributed across the Mogollon Rim of Arizona and New Mexico, at elevations from approximately 2,300 to 8,000 feet. The species inhabits Petran Montane Conifer Forest, Great Basin Conifer Woodland, Interior Chaparral, and Arizona Upland Sonoran Desertscrub communities (Rosen and Schwalbe 1988; Brennan and Holycross 2006). The species is widely considered to be one of the most aquatic of the gartersnakes (Drummond and Marcias Garcia 1983; Rossman *et al.* 1996). It is strongly associated with clear, rocky streams, using predominantly pool and riffle habitat that includes cobbles and boulders (Rosen and Schwalbe 1988; Degenhardt *et al.* 1996; Rossman *et al.* 1996; Nowak and Santana-Bendix 2002; Ernst and Ernst 2003). Narrow-headed gartersnakes have also been observed using reservoir shoreline habitat in New Mexico (Fleharty 1967; Rossman et al. 1996, Hellekson 2012b, pers. comm.) ***Despite the reputation of being highly aquatic, narrow-headed gartersnakes found in water represented less than 10 percent of total observations according to a multi-year telemetry study in New Mexico, with slightly more females found in water compared to males (Jennings and Christman 2012). These data suggest that this species may spend a relatively small percentage of its time in the water, but compared to other native gartersnakes, it is still the most aquatic.***
>
> ***Narrow-headed gartersnakes also use terrestrial, upland habitat during periods of cold-season dormancy, for gestation of young in pregnant females, for bask to aid digestion and for healing from injury or illness, and to escape flood events. Nowak (2006) found narrow-headed gartersnakes used upland habitat that was 328 ft away from the stream during early fall and spring months and may strongly associate with boulders in the floodplain during summer months. During cold-season dormancy periods, narrow-headed gartersnakes may use upland habitat up to 656 ft or farther out of the floodplain (Nowak 2006).***
>
> …As of 2016, as many as 41 of 51 (80 percent) known narrow-headed populations may exist at low densities and could be threatened with extirpation (Table 1).

U.S. Fish and Wildlife Service Biological Opinion, March 1, 2017 at 8-9. Emphasis added.

As you can see from the map below, proposed critical habitat covers the entire project area (indicated by the orange color).[5]

[5] Map available at the U.S. Fish and Wildlife Service "species profile" website, https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=C051. Last accessed April 8, 2019.

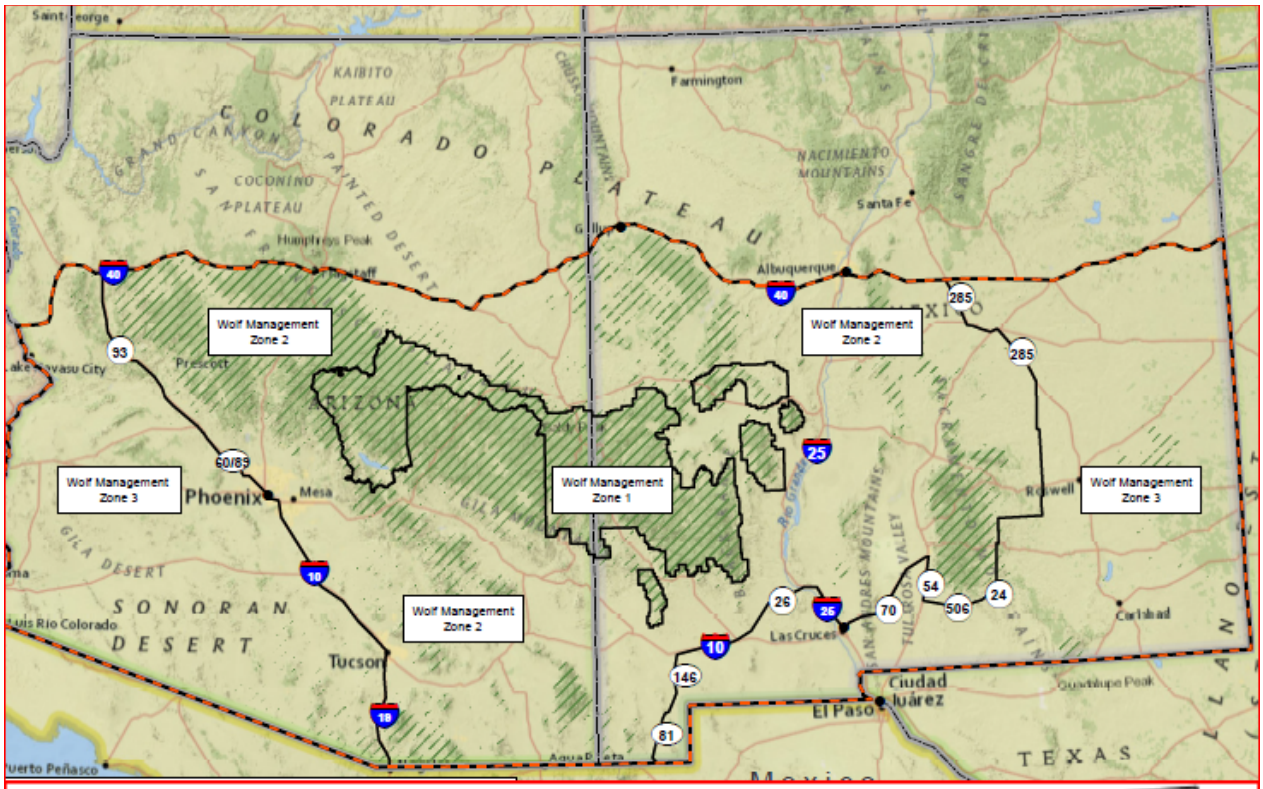


Narrow-headed gartersnake proposed critical habitat in Haigler Creek cuts across Haigler, Bar X Colcord, and Heber-Reno allotments.

The information in the EA regarding this species and the impacts of this project to the species is inadequate and there is no actual analysis of the impacts of this project on the narrow-headed gartersnake. There is no plan for managing livestock in the uplands. There is no analysis of the impacts of stock ponds, which can provide habitat for non-native species that prey on the gartersnake and can divert water from aquatic habitat, to this species. There is no analysis of the impacts of this project to the prey species of the gartersnake. These oversights must be corrected and the public must be provided an opportunity to review and comment upon that analysis.

Mexican Gray Wolf

The analysis of impacts to the Mexican gray wolf is insufficient. Notably missing from the EA is direction to permittees about preventing their livestock from impacting the Mexican gray wolf. As you can see from the maps below, this project area is in the very heart of Zone 1 of the Mexican gray wolf Management Area. The impacts of this project on this imperiled species cannot be minimized.


Wolf Management Zone 2
Wolf Management Zone 2
Wolf Management Zone 3
Wolf Management Zone 1
Wolf Management Zone 3
Wolf Management Zone 2
Phoenix
Tucson
Albuquerque
Santa Fe
Las Cruces
El Paso
Ciudad Juárez
Roswell
Carlsbad
Farmington
Prescott
Mesa
ARIZONA
NEW MEXICO
TEXAS
SONORAN DESERT
GILA DESERT
COLORADO PLATEAU
KAIBITO PLATEAU
COCONINO PLATEAU
PAINTED DESERT
NACIMIENTO MOUNTAINS
SAN ANDRES MOUNTAINS
TULAROSA VALLEY
Humphreys Peak
Guadalupe Peak


ARIZONA
NEW MEXICO
Flagstaff
Santa Fe
Albuquerque
Phoenix
Tucson
Gila NF
Apache Sitgreaves NF's
Project Location
Truth or Consequences

Under the currently operative 2015 Final Rule for the Revision to the Regulations for the Nonessential Experimental Population of the Mexican Wolf (80 FR 2512), the Mexican Wolf Experimental Population Area (MWEPA) stretches from Interstate 40 in the north to the U.S.-Mexico border in the south. The planning area at issue here is well within "Zone 1," the area within which Mexican wolves may be initially released or translocated, and "Zone 2," the area in which Mexican wolves may naturally disperse and occupy. *Id*.[6] Recent location data from the U.S. Fish and Wildlife Service indicates the wolves' occupied range covers a large portion of the project area. *Id*.

The Forest Service must consider, analyze, and disclose the impacts of livestock grazing on Mexican wolves, especially regarding the effects on prey species. It is well understood that livestock significantly displace certain native ungulates. Wallace and Krausman, 1987. Some deer species are known to avoid cattle. Krämer 1973. Elk and deer densities can decline by as much as 92 percent in response to introduction of livestock. Clegg 1994. Because wild ungulates and cattle use the landscape in similar ways (by eating plants and moving about the landscape), but wild ungulates are more effective agents of landscape change in a reflexive relationship with ideas of land that stress natural amenities over production, (Hobson et al. 2006), the Forest Service must consider the habitat preferences of ungulates as part of this planning process. Frisina 1992. Given that each AUM allocated to livestock effectively redirects the same forage away from native wildlife, the Forest Service should accurately discuss the public trust resources (wildlife) being replaced by private profit (livestock).

Because the ecological costs of livestock have been clearly documented (e.g., Belsky and Blumenthal 1997, Donahue 1999, Fleischner 1994, Gillis 1991, Jones 2001, Mack and Thompson 1982, Milton et al. 1994, Painter 1995, using information garnered from reviewing published peer reviewed research and citations therein), advocates of public-lands livestock grazing (as the Forest Service appears to be for this project) must be able to demonstrate that low-impact management and ecosystem sustainability are possible, on the basis of careful use of the best available science. They must be able to demonstrate how ecological costs can be minimized. Alien taxa (including domestic livestock) and their associated infrastructure must be treated as a significant ecological stress, and negative impacts on native plants and animals, on soils and soil organisms and on all other aspects of impacted ecosystems must be anticipated and minimized. This can only be done if management decisions are made based on knowledge of the impacted flora, fauna, and ecosystems, and a management program firmly grounded in the best available science, not unsubstantiated opinions, misunderstanding, and misinformation.

As the Forest Service is well aware, livestock and wildlife grazing can modify plant community composition and structure, and overabundant populations negatively impact rangeland–watershed function and wildlife habitats. Danvir, 2018. Negative effects on wildlife may include avoidance of water sources by wildlife, forage loss and altered plant communities, altered bird communities, and impacts to soils and insects. *Id*. For this planning process, the Forest Service must fully analyze and disclose how the presence, number, and grazing intensity of livestock will impact the native and nonnative plant communities. This is especially important for summer months when cattle tend to

[6] *See* https://www.fws.gov/southwest/es/mexicanwolf/pdf/Non_Essential_Map.pdf, Accessed March 25, 2019, attached as Appendix F. And see https://www.fws.gov/southwest/es/mexicanwolf/pdf/Mexican_Wolf_f10j_FAQ_FINAL.pdf, Accessed March 25, 2019, attached as Appendix G.

exhibit more intensive foraging over extensive movements and can therefore forage in place longer than native ungulates. Clark *et al*. 2017.

The Tonto National Forest provides all of the necessary ecological elements to support Mexican gray wolves. Unfortunately, there are many man-made elements that are putting the wolves in jeopardy. There have been high rates of human-wolf conflict during the nearly two-decades long reintroduction program. The population dropped by 12 percent, from 110 to 97, in 2015 with over a dozen dead adult wolves found during this time. While investigations by law enforcement continue, the majority of these losses were the result of illegal killing, one of the primary factors the USFWS cited in its determination that the species warranted listing under the ESA (80 Fed. Reg. 2488).

As part of this project, the Forest Service must provide strategic and proactive management and guidance to reduce wolf mortality. A greater emphasis on livestock management strategies that emphasize wildlife protection would reduce wolf losses and are a key, yet missing, part of the analysis for this project.

Specifically, we recommend that the Forest Service, as part of this project:

- identify and provide secure denning and rendezvous sites for wolf packs and management activities and livestock grazing prohibited during critical biological periods, including whelping and rearing;
- provide a secure condition for Mexican gray wolves by identifying, preventing, and addressing livestock-wolf conflicts, limiting and reducing human-caused wolf mortality;
- avoid or limit disturbance within 0.5 mile of known, active dens and rendezvous sites, incorporating measures to avoid or mitigate impacts of activities from April 1 to July 1;
- require the reporting of livestock carcasses within 24 hours of discovery, followed by proper disposal of the carcass within in or in proximity to established wolf pack home ranges, permits for livestock grazing;
- include specific best management practices to reduce livestock-wolf conflicts in the annual operating instructions for grazing permittees within or in proximity to established wolf pack home ranges. These BMPs should include, at a minimum, the removal of wolf attractants during calving season, increased human presence during vulnerable periods, use of range-riders diversionary and deterrent tools such as fladry fencing, airhorns, crackershells, etc. The Forest Service should provide additional information regarding conflict-reduction resources as they are developed;
- within established wolf pack home ranges, for these permits, the Allotment Management Plans, and Annual Operating Plans should incorporate measures to reduce livestock-wolf conflicts and include a clause requiring the modification, cancellation, suspension, or temporary cessation of activities to resolve livestock-wolf conflicts;
- allotments and permits in non-use status (such as the Pleasant Valley allotment) shall not be allowed to increase allowable AUMs when returning to use to help prevent livestock-wolf conflicts within established wolf pack home ranges.
- the number of active livestock allotments within established wolf pack home ranges should not be increased;
- existing allotments should only be combined or divided as long as doing so does not result in grazing on currently un-allotted lands or an increase in AUMs;

The Forest Service has failed to even discuss the Mexican gray wolf in the EA. There is no determination as to whether or not this project is likely to adversely affect the Mexican gray wolf. The Forest Service must take a step back in this project and conduct an analysis regarding the impacts of this project to the Mexican gray wolf and allow for public review and comment upon that analysis.

Specifically, the Forest Service must analyze:

- The impacts of domestic sheep and livestock use of the driveway and the allotment displace prey species for wolves, such as deer and elk.
- The economic cost-benefit analysis of livestock grazing impacts on the Mexican gray wolf reintroduction project.

As the Forest Service is aware, whether a population is designated "essential" or "nonessential" affects whether federal agencies have a duty to consult with Fish and Wildlife Service (FWS) on certain federal actions under ESA Section 7(a)(2), not whether or not a project is likely to jeopardize a species. Where a population is designated "nonessential," federal agencies are not required to formally consult with FWS on actions likely to jeopardize the continued existence of the species. 16 U.S.C. § 1536(a)(2). Instead, federal agencies must engage in a conferral process that results in conservation recommendations that are not binding upon the agency. Id. § 1536(a)(4). It is clear from the EA that this legal requirement has been met.

Riparian

Given the well-known and well documented impacts of livestock grazing to riparian areas in the southwest, it is critical that the Forest Service take a hard look at the impacts of this project. There are 36 miles of perennial and intermittent stream channels within the project area that support riparian vegetation, with the majority found in the area of the sheep driveway. EA at 29. The riparian vegetation within the project area has been reduced from historic conditions. Preliminary EA at 16. Unfortunately, and unwisely, the Forest Service does not appear to be excluding livestock from the rare and fragile riparian areas found in the project area and instead will focus on providing "alternative, developed water sources" to "lessen the amount of time cattle may spend in riparian areas." Preliminary EA at 16-17. These statements appear to have been removed from the Draft EA, but the project has not been changed to reflect the need to protect these important areas.

Livestock grazing is and has been a primary cause of stream and riparian habitat degradation in the western United States. The negative impacts of livestock grazing in riparian areas have been well documented. Poff, et al. 2011, Kovalchik and Elmore 1992. The scientific literature reveals that livestock grazing negatively affects water quality and seasonal quantity, stream channel morphology, hydrology, riparian zone soils, instream and streambank vegetation, and aquatic and riparian wildlife. Belsky et al. 1999, Ohmart 1996, Elmore and Kauffman 1994. Invertebrate and small mammal habitat is improved by livestock exclusion from riparian areas. See, e.g. Herbst 2011, Hayward et al. 1997. There is evidence of the benefits of livestock exclusion within the project area, specifically in the San Francisco River, and within southern Arizona there is scientifically documented evidence of the improvements to riparian areas post-livestock exclusion from the San Pedro Riparian National

Conservation Area (SPRNCA), which provides a robust record of improvement following livestock exclusion. From riparian canopy forest recovery to the increases in avian abundance, the scientific analyses of post-grazing effects in the SPRNCA form a strong record of the benefits of livestock exclusion that must be considered by the Forest Service while determining whether to authorize livestock grazing on these allotments where doing so will impact riparian areas. *See* Appendix E, Annotated bibliography of scientific research specific to livestock exclusion in riparian areas.

The cessation of livestock grazing in riparian areas can increase the abundance of small mammals that require dense vegetation. Soykan, et al. 2009. The substantial increase of plant cover at low height intervals that followed the removal of livestock from southwestern riparian areas can substantially increase the abundance of small mammal species that prefer cover characteristic of grassland or riparian woodland habitats. Soykan, et al. 2009, citing Duncan 1988, Krueper et al. 2003. These benefits have not been adequately disclosed or analyzed as part of the no action alternative.

If the Forest Service authorizes livestock grazing and the use of the sheep driveway livestock must be prohibited and excluded from all riparian areas. This would help the Forest Service move these areas toward the desired conditions identified in the current Forest Plan, prevent further degradation of these areas, and ensure that the native species reliant upon these areas will be supported. This can help with compliance with the proposed Forest Plan as well.

The Forest Service must also analyze the impacts of the proposed livestock grazing in light of the known impacts livestock grazing in xeroriparian has on riparian areas. Levick et al. (2008) provide a comprehensive review of the ecological and hydrological importance of such systems, which provide important habitat also for many plant species (not just riparian-dependent species), refugia for plants and animals in times of drought (and climate change), a source of water for upland wildlife, and migration/dispersal corridors. Further, the relationship to the riparian and xeroriparian areas to the uplands are a critical component of wildlife habitat in the project area. Upland vegetation is directly related to winter species richness and abundance of avian species. Strong and Bock, 1990. Overgrazing and destruction of grasslands are leading causes of bird imperilment in the southwest. Finch, C. *Ed*. 2005. Livestock grazing has numerous known impacts to uplands, including the effects of range developments on habitat integrity. Fleischner 1994. This is an issue that has not been addressed in the EA and this shortcoming must be remedied.

Trespass livestock is an additional concern regarding riparian impacts associated with, but not analyzed as part of this project. There is a history of unauthorized grazing associated with the allotment and sheep driveway that are a part of this proposal. These issues have not been disclosed and remain unanalyzed, in violation of NEPA. The issue of trespass livestock was raised in recent litigation regarding the unauthorized use of the sheep driveway. The Forest Service must adequately disclose, analyze and address these issues before this project can move forward.

Suitability, Condition, Trend

The EA does not address the important issue of range suitability at all. There is no analysis of suitable range in the EA for each of the allotments and any verification of determinations made in the Forest Plans regarding livestock suitability.

Lack of Adequate Monitoring and Analysis of Livestock Grazing Impacts

The EA inadequately analyzes the impacts of livestock grazing to native wildlife species that are affected by social displacement due to livestock grazing.[7]

It appears that the Forest Service has not compared the known plant species in the project area to the Arizona rare plant lists or the Forest Service sensitive species lists. The project record should include a list of plant collections found in all of the allotments that are part of this project from the SEINet database (http://swbiodiversity.org/seinet/collections/index.php#). The Forest Service should review these lists to see if there are any plants that require further analysis. Is there a plan to monitor for impacts to these species and if so, what actions will be taken if impacts occur?

There is vague information on whether supplemental feeding of livestock will be permitted, and if so, how it will be monitored or enforced. The EA states only that "[s]alt and/or supplements would be placed where forage is abundant and current grazing use levels are low. Salt and/or supplements would not be placed any closer than one quarter mile from available water, recreation sites, or designated trails except where prior written approval had been obtained from the District Ranger." EA at 53. Further, the EA states that off-road vehicles could be used to place supplements. EA at 55. There is nothing in the EA regarding the required use of weed-free feed or forage or any indication whether the region has a source of this important resource to ensure livestock grazing on public lands does not spread invasive species.

Climate Change

There is insufficient analysis of the impacts of the project on the environment *in light of the compounding impacts of climate change.* For example, given the likelihood of hotter and dryer conditions in the southwest, how will this project exacerbate the already alarming impacts associated with the impacts of climate change on game species, threatened and endangered species, on Management Indicator or Special Status species? How will fencing and other related infrastructure associated with this project further fragment the landscape and how will this impact species already harmed by the rapid on-the-ground changes associated with climate change? How will this affect what the agency considers suitable range for livestock? These questions have not been asked nor answered. Again, this precludes a Finding of No Significant Impact and has prevented adequate public review and comment.

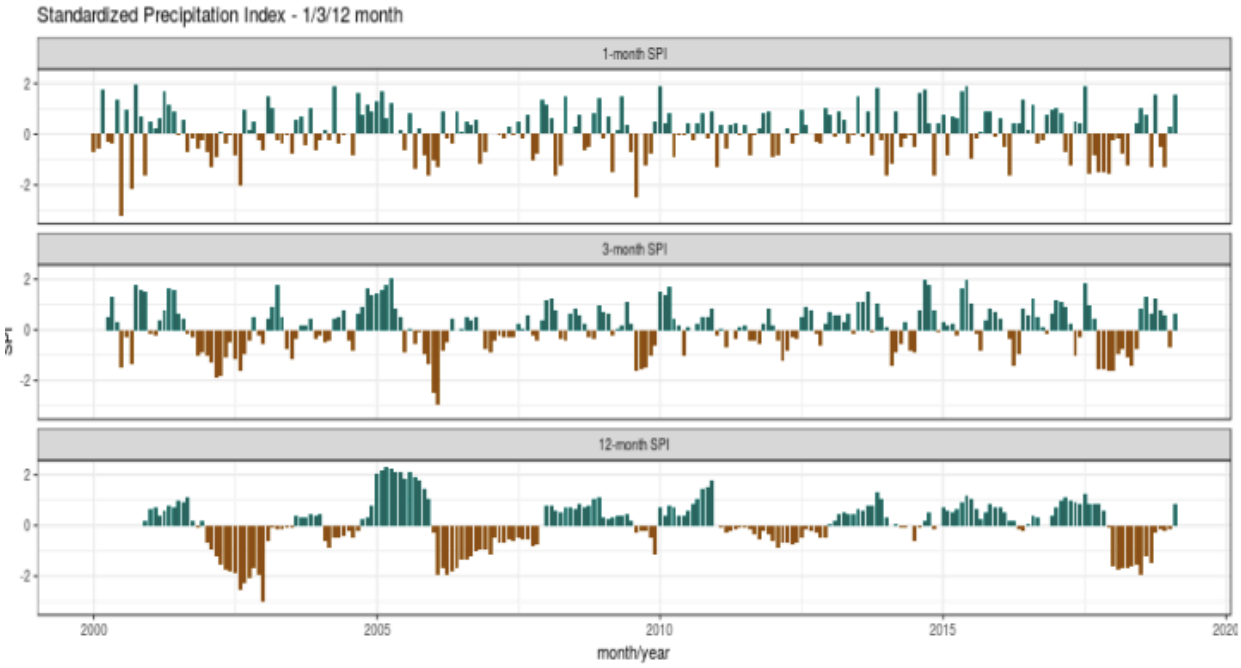
Drought

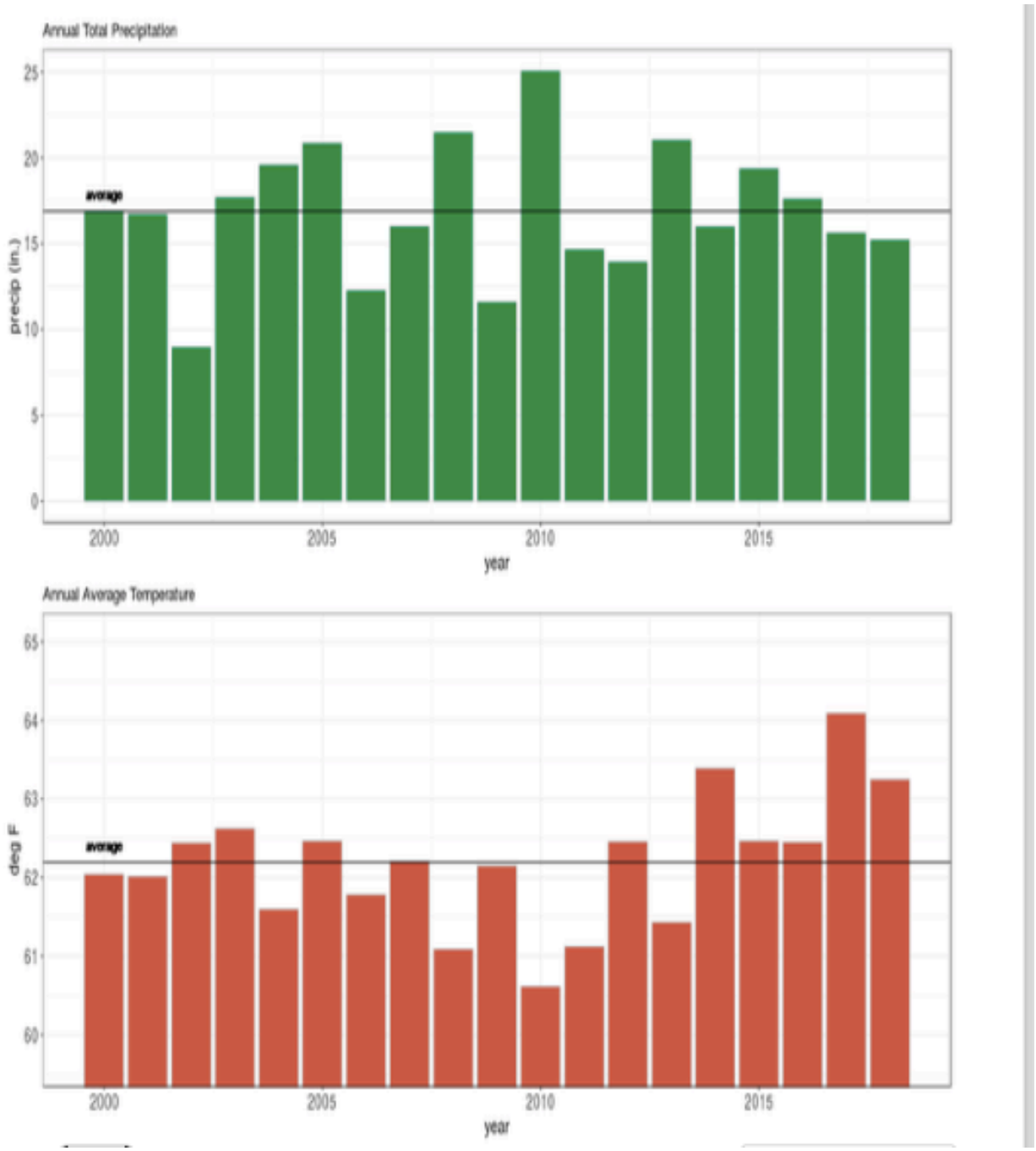
Information in the EA indicates that the project area is experiencing drought. EA at 28. Unfortunately, the EA indicates that at some point in the future the Tonto National Forest will work with the permittee to develop drought preparedness guidelines to be included in the Allotment Management Plan to "help frame initial communications related to the first signs of management impacts due to drought." EA at 54. Unfortunately, this has a two-fold negative impact. First, the public will have had no opportunity to help frame and flesh out the drought plans; and second, the impacts of

[7] Bock, C.E., Bock J.H., 1993; Krueper, D. J. 1993; Donahue, D. L. 1999.

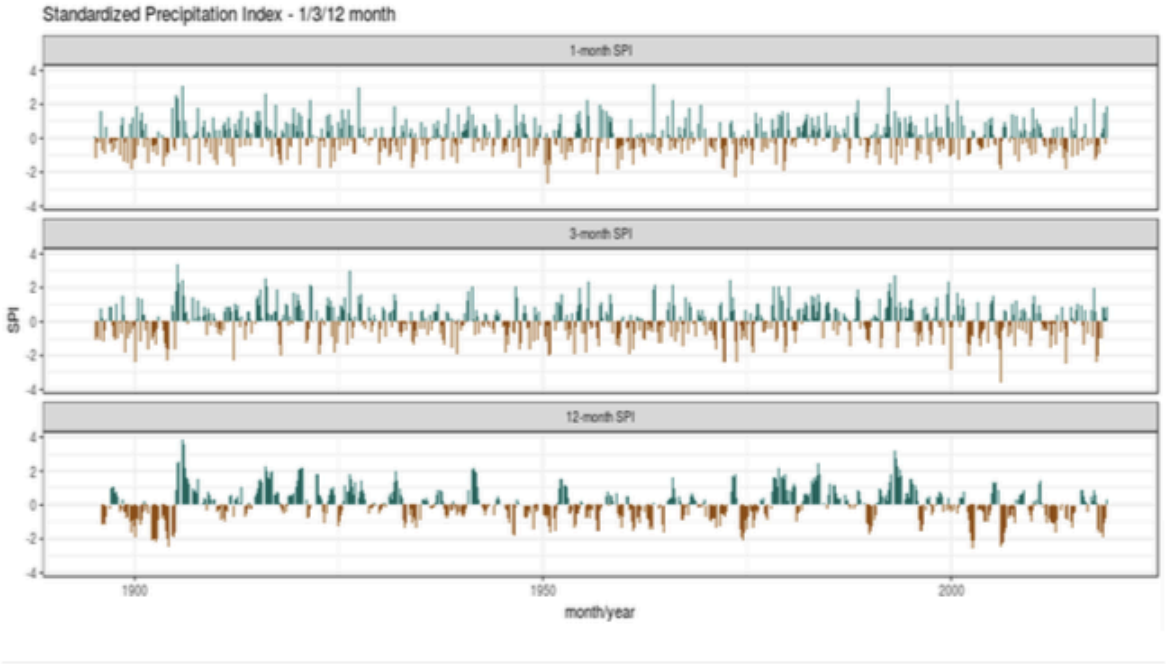
the drought are already evident and therefore the Forest Service should be taking action now to prevent further management impacts exacerbated by the drought.

To characterize drought on a range of timescales the Forest Service uses the Standardized Precipitation Index (SPI). EA at 54. SPI estimates for Pleasant Valley indicate the community has been experiencing drought conditions twelve of the last eighteen years since the year 2000. WWP utilized the SPI tool referenced in the EA (at page 20) on March 25, 2019. In addition to the precipitation data indicating drought conditions, the data indicate an increase in average temperatures.





The EA for this project must explain the rationale for increasing the number of livestock using the project area, including the sheep driveway, during a period of increasing drought and higher temperatures. Additionally, if the Forest Service uses the SPI tool to look at the long-term climate changes it is clear that the project area is getting hotter and drier, but also that the precipitation variability is getting more extreme and the period of wet cycles is decreasing and the amount of precipitation during the wet cycles is dropping.



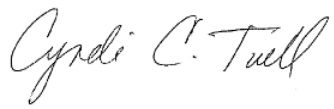
Given the apparent and clear trajectory, the Forest Service must plan now, as part of this project, to protect federal public lands from the impacts of livestock grazing on lands already impacted by drought conditions.

Conclusion

Where FLPMA requires that goals and objectives for public lands be established by law as guidelines for public land use planning, and that management is on the basis of multiple use and sustained yield, it adds, "unless otherwise specified by law." §102(a)(7). And "multiple use" is specifically defined in the statute as, in part, "making the most judicious use of the land for some or all of these resources...the use of some land for less than all of the resources... with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." §103(c). Simply because the overarching land management plan describes these allotments as "available" for grazing doesn't preclude the agency from taking a hard look at the balance of uses at the site-specific level.

Therefore, we encourage the Forest Service to revise the existing environmental analysis to correct the deficiencies we have identified above. Clearly, as we have explained above there are many reasons that a Finding of No Significant Impact are inappropriate. We look forward to reviewing the next step in this NEPA process for this project.

Sincerely,



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ATTACHMENTS (not resubmitted at this time as these were provided with our prior comments and are part of the project record)
Appendix A, complaint filed by Neighbors of the Mogollon Rim, Inc, April 11, 2018

Appendix B, Mogollon Rim Settlement dated October 11, 2018

Appendix C, GAO Report to the Committee on Natural Resources, House of Representatives: Unauthorized Grazing: Actions Needed to Improve Tracking and Deterrence Efforts

Appendix D, all references used for bighorn sheep section

Appendix E, Annotated bibliography of scientific research specific to livestock exclusion in riparian areas

Appendix F, Non-Essential map for Mexican Gray Wolf

Appendix G, Mexican Gray Wolf 10-J Rule, Frequently Asked Questions

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