August 31, 2022

USDA Forest Service Southwest Region
ATTN: Objection Reviewing Officer
333 Broadway Blvd SE
Albuquerque, NM 87102

Dear Objection Reviewing Officer,

This is an objection, as per 36 CFR part 219 subpart B, to the *Draft Record of Decision Tonto National Forest Revised Land Management Plan* published on March 25, 2002, and issued by Tonto National Forest Supervisor Neil J. Bosworth, to implement Alternative B as described in the associated Final Environmental Impact Statement (FEIS).

I have been involved in the public planning process for the revision of the Tonto National Forest's current land management plan (LMP) since it was initiated in 2014. That includes attending in-person planning workshops in Phoenix and submitting written comments. I submitted scoping comments in 2014, and more comments in response to the Preliminary LMP released in 2017, and also the Draft LMP issued in 2019. I am concerned about all of the Tonto's natural resource management issues, but I am especially interested in livestock grazing management, so my objection is limited to those components of the Revised LMP.

The existing Tonto National Forest Land & Resource Management Plan was issued in 1985, and despite being subsequently amended, it's obviously obsolete. So, I was encouraged when the Tonto announced in 2014 that it was time to draft a new plan. The obvious presumption was that a revised plan would be an improvement over the existing one. That expectation, however, was no fully met.

The four major livestock grazing management issues that I addressed in my previous comments were:

- Suitability of Sonoran Desert allotments for grazing
- Setting conservative allowable upland forage utilization rates
- Protecting riparian areas from livestock
- Management of livestock during the ongoing climate change

My objection to the Revised Tonto National Forest LMP will address each of these issues separately in detail.

Suitability of Sonoran Desert For Livestock Grazing

The Tonto National Forest includes about 791,284 acres of rugged Sonoran Desert, about 27% of the entire Forest, and a lot of the rest of the Forest is steep and arid too. In other words, much of the Tonto National Forest is inherently unsuited for livestock grazing. The USDA Forest Service is required by federal law to assess the suitability of the lands under its jurisdiction for livestock grazing and other uses. Grazing suitability is a different thing than grazing capability. The Sonoran Desert portions of the Tonto National Forest are obviously capable of supporting

livestock grazing because it's occurring there. But grazing capability is only about whether or not the land CAN be grazed, while grazing suitability is about whether or not it SHOULD be grazed. The existing 1985 LMP recognized the issue of grazing suitability because it placed some areas under Rangeland Management Level A, which excluded them from livestock grazing.

During the NEPA public planning process that was engaged to produce the Revised LMP, scoping comments about this issue were received that resulted in the inclusion of the following grazing guideline on page 89 of the 2017 Preliminary LMP:

Allotments comprised of large percentages of Desert Ecological Response Units (Sonora-Mojave 25 Mixed Salt Desert Scrub, Sonoran Paloverde-Mixed Cactus Desert Scrub, and Sonoran Mid-26 Elevation Desert Scrub) should be closed, in whole or in part, as they become vacant.

This common-sense proposal, however, was deleted from the 2019 Draft LMP and subsequent Revised LMP.

The 2017 Preliminary LMP also proposed the following related grazing guideline on page 89:

Vacant allotments and permits that are waived without preference should be evaluated for one of the following options:

- *Conversion to forage reserves to improve resource management flexibility*
- *Grant to nearby permittees to form logical grazing management units*
- *Closure to permitted grazing, in whole or in part*

This provision appeared in a slightly different version as a grazing objective on page 40 of the 2019 Draft LMP, and page 42 of the Revised LMP:

At least one vacant allotment will be evaluated for one of the following options every two years, until there are no vacant allotments. If additional allotments become vacant (waived without preference) they will be evaluated for one or a combination of the following options within two years:

- *Conversion to forage reserves to improve resource management flexibility.*
- *Grant to current or new permitted livestock producer.*
- *Closure to permitted grazing, in whole or in part.*

The Revised LMP also stated on page 41 that only one grazing allotment on the Forest, the Goldfield allotment, was officially closed to grazing, while the accompanying FEIS stated that eight allotments were currently vacant. They include several allotments located in the Superstition Wilderness Area that haven't been grazed for many years.

It's possible that this new grazing objective could have the positive result of ending livestock grazing in some of the Forest's Sonoran Desert areas, or other areas unsuitable for grazing. But the national, state, and local cattlegrowers' associations having been promoting the political narrative that there's too much public land that's not being grazed, so I'm sure they are

supporting this objective with the understanding that it will result in allowing grazing to resume on the Tonto's vacant allotments.

And I fear they are correct, because it appears the Tonto National Forest's managers are biased in regards to the issue of grazing suitability. For example, on page 32 of the March 2022 Draft Record of Decision it states that a no-grazing alternative for the entire Forest, "would not meet legal direction that forests will be managed using multiple use and sustained yield principles per the National Forest Management Act and Multiple-Use Sustained Yield Act of 1960." But this isn't true, as a case could be made that the hot, arid, and rugged lands of the Tonto, which also serve as the watershed for the City of Phoenix's water reservoirs, are unsuited for grazing. The Multiple Use Doctrine doesn't mean that all uses must be allowed, but that only those uses that benefit the public interest should be allowed.

Moreover, on page 163 of Volume 3 of the FEIS there's a response to a public comment wherein the submitter expressed concern about the possibility of grazing being reauthorized in the vacant allotments located in rugged Sonoran Desert of the Superstition Wilderness. The Forest's response was, "To help you imagine cows grazing on Reavis or Superstition Allotments, a cow on the adjacent Millsite allotment looks very similar to one standing on the Reavis or Superstition allotments." I am certain there have been many people that have visited that portion of the Superstition Wilderness which includes the Millsite grazing allotment and been disappointed that cattle were permitted there.

The only way the general public will be able to know if the vacant grazing allotment evaluation process is fair and thorough is if the Tonto initiates the NEPA public planning process BEFORE it makes any administrative decisions to permit grazing on a vacant allotment. There's no mention in the Revised LMP, however, of whether or not NEPA will be engaged for these important evaluations.

Setting Allowable Upland Forage Use Rates

Range scientists agree that one of the most important features of a livestock management plan, especially in in arid areas, is to limit annual upland forage utilization to a conservative level. Research (Holechek 1988) on arid Southwestern rangelands has shown that forage utilization must be limited to an average of 35% annually in non-drought situations. In recent years the Forest Service has touted an adaptive management strategy that's more flexible. But adaptive management doesn't mean there's no need for any basic sideboards.

Under the existing 1985 LMP, upland forage utilization limits on the Tonto are as follows:

- Limit use to conservative levels of 30 to 40 percent of current year's growth for grasses;
- Limit use to 50% of current year's growth for woody (browse) species.

These limits were missing from the 2017 Preliminary LMP, and were replaced with this grazing guideline on page 89:

Grazing use should be managed at conservative levels (30 to 40 percent) using rotational grazing systems.

But this guideline was deleted from the 2019 Draft LMP. The Revised LMP only states on page 41 that:

In general, the Tonto manages grazing at conservative use levels. This grazing intensity (based on percent use of forage by weight) should provide for plant integrity, density, diversity, and regeneration over time.

But there is no description of what the Forest considers to be "conservative use levels." The FEIS states the reason that specific upland utilization standards weren't included in the Revised LMP is because there could be a need to do some intense, targeted grazing in specific locations for weed control or wildfire fuel reduction. But those situations should be treated as exceptions, as they wouldn't be part of any regular ranching operation. It's my understanding that the Forest Service's Southwestern regional office informed the Tonto staff to delete all grazing utilization guidelines from the Tonto's Revised LMP. It's difficult to not suspect a nefarious motive.

Maximum forage utilization guidelines are typically set in an allotment's management plan (AMP), when there is one, and also in the annual operating instructions (AOI) for each allotment. These documents are public records, but they aren't usually available to the public unless a Freedom of Information Act (FOIA) request is made. So it's difficult for the public to know what utilization guidelines are being used. The Revised LMP explains that upland forage utilization monitoring on the Tonto National Forest has been largely delegated to the University of Arizona's Cooperative Extension's Reading the Range Program. But the monitoring information gathered by that program isn't publicly disclosed.

Another deficiency of the Revised LMP regarding allowable upland forage utilization is its failure to address a unique aspect of cattle grazing in the desert. The existing 1985 LMP addresses it with the guideline mentioned above that limits cattle use to 50% of current year's growth for woody (browse) species. This was included in the LMP to address the issue of the "brush grazing" that's occurring on the Tonto's desert allotments. Cattle prefer to eat herbaceous plants, so they quickly denude the desert of its limited herbaceous vegetation and are forced to eat woody plants to avoid starvation (Smith 1993). In fact, research (Rosiere 1975) has shown that cattle grazing the Southwest's deserts don't get more than 50% of their forage from desert grasses. This type of grazing is obviously very destructive to desert ecosystems. It's particularly damaging to desert mule deer habitat. Cattle and mule deer diets typically have a minor overlap, because cattle prefer to graze herbaceous plants and the deer prefer to browse woody plants. But the necessity of cattle to eat woody plants in the desert means they compete with the mule deer for browse. This competition is increased during the hot summers and droughts if grazing is permitted on desert areas in the summer. (The necessity of ranchers having to resort to brush grazing is another example of the unsuitability of the desert for grazing.)

Protecting Riparian Areas From Livestock

The generally arid nature of the Tonto National Forest, and the fact that climate change is making it steadily drier and hotter, means that its relatively scarce perennial riparian areas are very important wildlife habitat. Furthermore, scientists are telling us we have entered an

Anthropocene epoch, wherein the human impact on the Earth's ecosystems has created an unprecedented increase in the rate of species extinction. All of this means that the destructive effects of livestock grazing in the Forest's riparian areas should be minimized, and riparian vegetation should not be considered a significant source of livestock forage. In fact, research has shown (Belsky 1999) that there's NO level of livestock use that doesn't negatively impact the ecological health of riparian areas in the arid West. Furthermore, much of the Tonto is comprised of the headwaters of the streams that supply the important municipal water reservoirs mentioned above. In fact, recent research (Booth 2021) found that livestock grazing in headwater wetlands invariably leads to their warming, resulting in increased downstream water scarcity. This effect will be worsened by the ongoing global warming.

The existing 1985 LMP recognized the issue of riparian protection and stated on page 12:

"Management emphasis in riparian areas will feature wildlife needs over recreation and grazing."

Under the existing 1985 LMP, riparian vegetation utilization limits are as follows:

- Riparian woody species - Limit browse to 50% of leaders on upper 1/3 of plants up to 6 feet tall;
- Riparian herbaceous species - Limited to 40% of plant species biomass for deergrass
- Riparian emergent species - Maintain 6-8 inches of stubble height for emergent species such as rushes, sedges, cattails, and horsetails; measured during grazing season.

(The 2002 Tonto National Forest *Riparian Area Management Utilization Guidelines* recommended that streambank trampling be limited to < 20% of alterable streambanks. But that specific restriction was apparently never implemented.)

But there is no similar statement about the Forest's riparian management emphasis in the 2017 Preliminary LMP, the 2019 Draft LMP, or the Revised LMP.

Instead, the 2017 Preliminary LMP merely proposed the following riparian guidelines on page 53:

Herbivory of riparian plants should not impact the long-term health of riparian plants. Livestock and wildlife management practices should allow wetland/riparian vegetation to recover.

In the 2019 Draft LMP those riparian guidelines were slightly revised as follows on page 99:

Livestock and wildlife management practices should allow riparian vegetation to recover. Plant development or recovery sufficient to sustain healthy riparian areas should occur following each livestock use period.

But the only specific allowable riparian utilization guidelines in the Draft LMP were on page 113:

Annual operating instructions should schedule pasture use to achieve 50 percent utilization of current year's growth on riparian woody/browse species and 50 percent utilization of herbaceous vegetation within the riparian management zone. (page 113)

In other words, the Draft LMP proposed to significantly INCREASE allowable livestock use of riparian areas from what is currently allowed in the existing 1985 LMP. Fortunately, this inappropriate riparian utilization guideline was deleted from the Revised LMP. It was replaced with this new proposed grazing standard on page 42:

Livestock use in and around riparian areas will be evaluated on an allotment-specific basis. Design elements (e.g., deferment, herding, and fencing) will be implemented where needed.

This means that the Revised LMP lacks any specific allowable utilization guidelines for what is probably the most important habitat on the Forest. There are some disturbing clues, however, about the Forest's riparian management emphasis in the Revised LMP. The grazing standard mentioned above, for instance, implies that some level of grazing will be allowed "in" riparian areas. And the following riparian guideline found on page 101 of the Revised LMP admits that grazing is destructive but implies it will still be allowed in riparian areas:

Livestock management practices should allow riparian vegetation to recover. Plant development or recovery sufficient to sustain healthy riparian areas should occur following each livestock use period.

This level of riparian protection is inadequate.

It also fails to consider that the Tonto's desert riparian areas periodically experience damage from natural disturbances in the form of flash floods from intense rainstorms. A severe rainstorm passed over central Arizona in the fall of 2019, for example, that produced floods which seriously damaged several perennial streams on the Tonto. And climatologists say climate change will increase the frequency and severity of these types of storms. The Forest's desert riparian areas are adapted to flood disturbances, but it will be more difficult for them to recover if the storms get more frequent and worse. Since livestock grazing inflicts additional, unnatural, disturbances upon the Forest's streams, it should always be severely limited, if not totally excluded from, riparian areas. And it should be prohibited in them for several years after they are damaged by floods.

Management of Livestock During The Ongoing Climate Change

Climatologists have reported that the ongoing megadrought in the Southwest has produced the driest two decades in the last 1,200 years. They warn that climate change is creating aridification in the region, wherein the weather will be permanently drier. As I mentioned above, this means the Forest's desert allotments will become even more unsuitable for grazing, and its riparian areas will need greater protection. And there will be more wildfires too. But these issues are inadequately addressed in the Revised LMP.

In regards to livestock management, the existing 1985 LMP doesn't even mention drought in relation to grazing management. But the 2017 Preliminary LMP initially addresses it with the following proposed grazing guideline on page 89:

Drought preparedness is emphasized in Allotment Management Plans and may include flexible stocking rates/livestock classes, flexible rotation schedules, and other strategies for dealing with climate variability.

The Revised LMP slightly revises this grazing guideline on page 42:

Drought preparedness should be emphasized in allotment management plans and may include flexible stocking rates/livestock classes, flexible rotation schedules, and other strategies for dealing with climate variability.

But the Revised LMP fails to identify the Forest's primary objective for managing livestock grazing during drought. For example, in order to avoid reductions in authorized livestock numbers during drought:

1. Would livestock be given access to riparian areas from which they would otherwise be excluded?
2. Would livestock be allowed to exceed the Forest's "conservative" allowable forage utilization levels?
3. Would livestock be authorized to use vacant allotments, or other areas currently closed to grazing?
4. Would grazing permittees be allowed to dewater natural springs to provide water for livestock?
5. How long would drought-stricken lands be allowed to recover before being grazed again?

In other words, is the Forest's drought management strategy more focused on protecting the economic interests of individual grazing permittees, or the protection of publicly owned natural resources in the interest of all Americans?

This same question can be asked about the Forest's primary objective for managing livestock grazing on lands that have been burned by wildfires. The Tonto has suffered three enormous wildfires during the last three years:

- Woodbury Fire, 123,875 acres – summer of 2019
- Bush Fire, 193,455 acres – summer of 2020
- Telegraph Fire, 180,757 acres – summer of 2021

A review of the recent history of the Sunflower grazing allotment in the Forest's Mesa Ranger District sheds some light on the Forest's primary objective for managing livestock grazing during drought and after wildfire.

On October 9, 2015, the Mesa District Ranger issued a decision notice for the Sunflower allotment that prohibited cattle grazing on the allotment's pastures located west of State Route 87. These pastures, which are comprised of Sonoran Desert, include the Otero, Ranger Station, Adams, and Sycamore Creek Riparian pasture. The decision stated that:

"Non-use will continue until such time as a new environmental analysis is conducted to show the need for these pastures and effects of authorizing grazing within them."

In 2020 much of the Sunflower allotment was burned in the enormous Bush Fire. After the fire the allotment's 2021 annual operating instructions (OAI) authorized "temporary" grazing in the unburned Otero Pasture, the unburned portion of the Cottonwood Pasture, and also in the eastern portion of the adjacent Bartlett grazing allotment, which is also Sonoran Desert, and hadn't been grazed for many years. All of these areas have important perennial riparian areas, including Sycamore Creek and other streams that provide endangered species habitat. The AOI instructed the allotment's grazing permittee to keep cattle away from the streams by actively herding them, as there weren't any fences to keep them out. It's doubtful there were any functioning livestock waters in these areas, so it's likely that it would have been a difficult job to keep the cattle away from the streams.

The 2021 AOI explained that the objective was to "minimize grazing impacts within recently burned areas during a drought and provide available forage in order to maintain a viable ranching operation." It also admitted that these authorizations to graze unused desert areas were made during a time of "exceptional drought conditions." The allotment's 2022 AOI made good on the promise that the use of these areas would be temporary and didn't include these formerly unused pastures in the grazing rotation, but it did include a large increase in authorized cattle numbers, and they were allowed to resume grazing on the allotment's burned areas, just two years after the fire, and during the continuing drought.

Obviously, the Forest's primary objective on the Sunflower allotment after the fire was to maintain the ranching operation. How else could you characterize a decision to authorize grazing on ungrazed desert lands that were experiencing exceptional drought?

It's also revealing to review the recent annual operating instructions (OAI) for the Coolidge Parker and Lyons Fork allotments, which were burned in the 2021 Telegraph Fire. In early 2021, before the fire, the Coolidge Parker allotment was authorized for 70 adult cattle. But after the fire, the allotment's 2022 AOI only reduced authorized adult cattle to 69 head. Similarly, the early 2021 AOI for the Lyons Fork allotment authorized 99 adult cattle, while its 2022 AOI only reduced authorized adult cattle to 88 head. These two allotments were also experiencing drought conditions.

Moreover, a letter sent by the Globe Ranger District to the Coolidge Parker allotment's permittee on September 30, 2021, regarding the 2021 AOI stated that:

"As the Telegraph Fire burn area recovers, we will continue to manage each allotment individually to reintroduce cattle at the earliest possible date …."

As with the Forest's drought management strategy, is its post-wildfire management strategy seems more focused on protecting the financial interests of grazing permittees, than the protection of publicly owned natural resources in the interest of the general public. How else could you characterize a decision to resume grazing on burned areas as quickly as possible during a drought?

Furthermore, the Sunflower, Coolidge Parker, and Lyons Fork AOIs all stated that the permittees must comply with the Forest's allowable use standard to limit upland herbaceous forage utilization to "30 to 40% of current year's growth." How much growth of herbaceous vegetation is there, if any, during a severe drought?

Conclusion

I object to Mr. Bosworth's decision to implement the 2022 Revised Tonto National Forest Land Management Plan because of the deficiencies I described in detail above. I also believe the Revised Plan violates the National Environmental Policy Act (NEPA) because it provides inadequate information about important issues.

I suggest that the following changes be made to the Revised LMP:

- Require that the NEPA public planning process be engaged to evaluate the fate of vacant grazing allotments before any grazing can be authorized on them
- Identify specific and conservative allowable upland forage utilization limits for herbaceous vegetation
- Recognize that "brush grazing" of woody vegetation is a result of the overgrazing of herbaceous desert vegetation
- Prohibit grazing on pastures comprised of Sonoran Desert during the hot summer months
- Require that the Reading the Range Program forage utilization monitoring data be publicly available on the Internet
- Identify specific riparian utilization guidelines
- Prohibit grazing in riparian areas recently damaged by floods
- Require that the Tonto National Forest annually post PDF copies of the operating instructions (AOI) for all of its active grazing allotments to its website
- Require that the Tonto National Forest post PDF copies of all current grazing allotment management plans (AMPs) to its website
- Include more details about the primary objective of the Forest's drought management strategy regarding livestock grazing
- Include more details about the primary objective of the Forest's post-wildfire management strategy regarding livestock grazing

Sincerely,

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