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Objection to Cottonwood Range Improvements Environmental Assessment

Via electronic mail to: <u>objections-intermtn-regional-office@usda.gov</u> tina.marian@usda.gov

References Provided at: https://app.box.com/s/13gol1wgw7pwah98s2sy1kigo85gifav

We, the undersigned are filing this Objection. John Carter is the lead objector. Each of us are signatories to the February 10, 2018 scoping comments regarding an Environmental Assessment with the purpose of improving livestock distribution and movement on the Cottonwood Allotment on the Monticello District of the Manti-La Sal National Forest.

This objection is related to our prior scoping comments and submitted alternatives which proposed grazing utilization, a current capability and stocking rate analysis reflecting Forest Service Regional Criteria¹ to adjust stocking rates, and management changes to address the overgrazing of particular areas in increasingly arid conditions within the Cottonwood Allotment, as identified in the January 16, 2018 scoping notice.

After the scoping period ended on February 16, 2018, we became aware of the scoping comments and an alternative submitted by Grand Canyon Trust ("Trust"). That alternative similarly emphasizes grazing utilization and management changes to address the problems that the Forest Service is proposing to address solely through infrastructure construction. Both our and the Trust's alternatives were jointly and summarily eliminated from detailed analysis and public comparison of environmental consequences, also including a failure to analyze a No Grazing Alternative. This was due

¹ U.S. Department of Agriculture (USDA) (1998) Rangeland Capability and Suitability Determinations for Forest Plan Revisions R-4 Revised 2/20/98. Region 4 Forest Service, Ogden, UT.

to an illegally narrow purpose and need statement that prohibited a host of reasonable alternatives from consideration.

Our analysis of the EA is that the purpose and need is unreasonably narrow; it illegally eliminates reasonable alternatives for improper reasons; it dismisses nearly all concerns about climate change and grazing impacts on the uplands, including Little Dry Mesa; and prevents the public from being able to judge and comment on alternatives that address the cattle distribution issues by capacity and stocking rate analysis, grazing and rangeland management changes, rather than structural water improvements.

Overview

The three problems which the Forest Service is proposing to address with the Cottonwood Range Improvements Project include (1) damage to three springs by cattle, (2) overgrazing of particular areas in three of the Cottonwood Allotment pastures, and (3) increasingly arid conditions of particular upland areas within the allotment. The purpose and need for the Project responds to the permittee's request for infrastructure to address those three problems. The proposed infrastructure includes (1) fences around the three springs; (2) seven additional cattle ponds; (3) two additional water troughs; (4) a pipeline to two new ponds and one new trough; (5) a 5,000 gallon water storage tank; and (6) fencing to divide the Chippean pasture. The new cattle ponds and water troughs are intended to draw the cattle away from areas they are overgrazing to Little Dry Mesa and other upland areas where the cattle have not been grazing so heavily.

The EA, as drafted, does not allow for any non-infrastructure solution to the three problems. Our scoping comments, submitted on February 10, 2018, encouraged the development of an alternative that would adapt to climate change by lowering the grazing intensity, avoiding additional water usage, and protecting vulnerable species.

More specifically, our alternative recommended:

- 1. Set stocking rates based on current capability, forage production, and animal consumption rates.
- 2. Set a forage utilization rate of 25%.
- 3. Provide for long-term rest, especially for overgrazed areas.
- 4. Close conflict areas to livestock use.
- 5. Reduce livestock emissions and consumption of plants, both of which contribute to climate change.
- 6. Address fish and wildlife concerns, including special status species.

Neither the Carter et al., nor the Trust alternative, both of which emphasized grazing management change, were compared for potential environmental consequences alongside the Forest Service's infrastructure alternative. They were rejected for improper reasons. This violates the intent of NEPA to consider reasonable alternatives in order to define the issues and provide a clear basis for choice.

Comments

1. The Purpose and Need is unreasonably narrow and does not allow for reasonable alternative means of addressing concerns on the Cottonwood allotment.

A. Background

Pursuant to the National Environmental Policy Act (NEPA), a statement of purpose and need is required to frame the reason for the agency proposal and to guide what action the agency may take.² Although agencies are provided with discretion to define a project's purpose and need, the statement must be reasonable.³ "A purpose and need statement will fail [for reasonableness] if it unreasonably narrows the agency's consideration of alternatives so that the outcome is preordained."⁴ Put differently, an agency cannot define its objective(s) so narrowly that only one alternative would accomplish the goal of the agency's action.⁵ Despite this prohibition on narrow purpose and need statements, the Forest Service has done precisely that in the Cottonwood Range Improvements Environmental Assessment, prematurely prescribing the outcome (structural improvements) without first considering reasonable alternatives to that outcome.⁶

The 2020 <u>purpose</u> of the proposal in the EA is similar to that in the 2018 scoping notice:

The purpose of the proposal is to <u>address specific concerns on the Cottonwood allotment that can be addressed with the addition of structural improvements</u> to the allotment. These improvements were also requested by the permit holder to:

- 1) Improve overall hydrologic function, water quality, pollinator habitat, and resistance and resilience to climate change of Sand spring, Nelson spring, and South Poison Canyon spring, while continuing to provide water access to livestock and wildlife.
- 2) <u>Improve livestock distribution by improving water distribution in the Big Flat, Chippean and Round Mountain pasture units.</u>
- 3) Control livestock movements between the eastern and middle part of the large (16,800 acre) Chippean unit.⁷ [Underlining added for emphasis.]

² 40 C.F.R. §§ 1502.13, 1508.9.

³ Alaska Survival v. Surface Transp. Bd., 705 F.3d 1073, 1084 (9th Cir. 2013).

⁴ *Id*.

⁵ Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

⁶ "While it is true that defendants could reject alternatives that did not meet the purpose and need of the project, they could not define the project so narrowly that it foreclosed a reasonable consideration of alternatives. *Davis v. Mineta*, 302 F.3d 1104, 1119 (10th Cir. 2002) (overruled on other grounds, *Dine Citizens Against Ruining Our Environment v. Jewell*, 839 F.3d 1276 (10th Cir. 2016) (internal citations omitted).

⁷ Cottonwood Range Improvements Environmental Assessment, 2 (hereinafter "EA").

The stated <u>need</u> for the EA proposal is similar to, but briefer than, the need stated in the 2018 scoping notice:

- <u>Limited</u> and poorly distributed <u>sources of water</u> in the Big Flat, Chippean, and Round Mountain pasture units of the Cottonwood allotment is resulting in concentrated livestock and wildlife use in some areas in the pastures.
- Inadequate protection of the developed springs has resulted in damage to wetlands, making them less resistant and resilient to climate change (drought and temperature increase).
- There is a need to <u>provide additional water sources that facilitate</u> <u>improved distribution of ungulates</u>, drawing them away from open meadows, wetlands, and riparian vegetation to areas less sensitive to use, such as upland areas that receive very little or no use due to lack of water.
- The Chippean unit is [a] very large pasture and is in need of further regulation of livestock movements.⁸ [Underlining added for emphasis.]

The EA proposes to address all of these claimed "needs" through <u>construction of</u> infrastructure:

- 1) Seven additional cow ponds (14 cow ponds currently exist in this portion of the Cottonwood Allotment, Fig. 1)
- 2) Two additional water troughs (16 water troughs currently exist in this area of Cottonwood Allotment, Fig. 1)
- 3) A 5,000-gallon water tank to capture and store water from Nelson spring
- 4) 2,800 feet of piping to bring water to one new pond and both new water troughs
- 5) Construction of one spring exclosure and enlargement of two other spring exclosures
- 6) Construction of 0.2 miles of fence¹⁰

⁸ EA, 2.

⁹ The EA project area encompasses 23,000 acres (EA, p. 1) of the 62,000-acre Cottonwood Allotment (personal communication, Tina Marian, Responsible Official, March 24, 2020). ¹⁰ EA, 4.

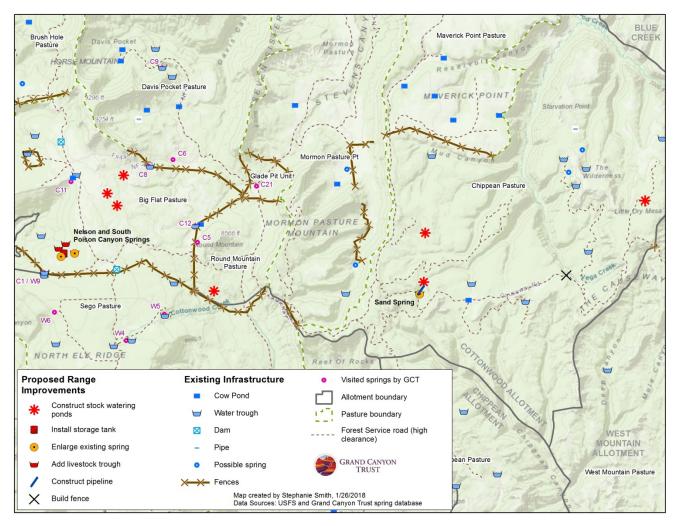


Figure 1. Map of existing and proposed cattle ponds and water troughs, springs, proposed spring exclosure and enlargements within the project area

B. Additional water infrastructure is not the only way to address concerns about distribution of cattle

The Purpose is unreasonably narrow because it only allows for structural improvements (i.e., excavating cattle ponds, storing water in a large tank, and piping water to additional water troughs) to address concerns regarding distribution of cattle in the Big Flat, Chippean, and Round Mountain pastures. There are several substitute actions that could be taken to address the concerns, including reduced forage utilization, daily riding, and non-use (e.g., on Little Dry Mesa), but the EA failed to consider any non-infrastructure actions due to the purpose and need, which would only allow for new infrastructure construction as a solution.¹¹

¹¹ Thus, to satisfy the environmental assessment process, the "purpose and need" of the project—initially determined through the planning process—must be defined to embrace a range of possible solutions beyond the specific project that the planning process has generated. Otherwise the outcome of the

In our scoping comments (p. 3) we opposed increasing the number of water developments. In place of those actions, we proposed grazing management changes to alter distribution. Both our alternative, as well as the Trust's, provide these lands with reduced cattle grazing amid climate change and would reduce the amount of money the public will pay for infrastructure to subsidize this private cattle operation.

The Forest Service states that by setting stocking rates on the basis of forage production and setting utilization at 25%, our alternative is outside the scope of the purpose and need and outside the scope of proposed actions, but mischaracterizes the alternative:

A decision to adjust permitted grazing numbers . . . in the allotment is <u>outside the scope of this analysis and the purpose and need</u>. Grazing is an approved activity in this allotment . . . The proposed action is not changing the Animal Unit Months (AUMs) that are permitted under the grazing permit and so analysis of climate change in the manner proposed is <u>outside the scope of the proposed actions</u>. ¹²

It should be noted that our alternative did not discuss whether grazing is an approved activity in the allotment, and did not propose that AUMs be changed. We did comment (p3) that using current forage consumption rates of cattle combined with a science-based utilization rate of 25% would result in a likely reduction of 75% in stocking rate. This is in the absence of using current forage capacity of the allotment itself, which is greatly reduced from potential. As we noted, the Manti Lasal NF LRMP documented 85% of suitable areas were in poor or fair condition which represents a system drastically altered from its potential species composition and production. For example, Poor Condition describes a system that is 0 - 25% of the climax community, while Fair Condition describes a system that is 26 - 50% of climax. The EA, citing the Forest Plan, "Improve or maintain range condition to fair or better (III-65)". So, the goal is continuation, and likely acceleration of these degraded conditions.

We proposed to match grazing capacity to forage production, which can decrease with drought and heat, by the aforementioned capability analysis, current forage production and current livestock consumption rates and utilization of 25%. Tina Marian, the EA Responsible Official indicates (email communication with Mary O'Brien, February 26, 2020) that the Forest has not analyzed range production data:

We have range trend data that recorded production values from the 1970s to the earlier 2000s and from about 2013 to 2019 we have some years of production data using cage clippings. I have not fully analyzed this data for

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assessment seems to be predetermined, with the proposed project being the only "alternative" that meets its own "purpose and need." *Jones v. Peters*, 2007 WL 2783387, at *18 (D. Utah Sept. 21, 2007). ¹² Comment/Issues Analysis, p. 14

¹³ Holechek, J., Pieper, R., and Herbel, C. 2004. Range Management Principles and Practices Fifth Edition. Prentice-Hall, NJ. Pp166 - 167.

¹⁴ EA, 3.

trends in forage production for the allotment.

The Manti LaSal NF has the data and GIS capacity to do the necessary analysis. In a recent paper, using these current Region 4 capability criteria, current forage production and consumption rates we found stocking rates needed to be reduced 90%. We believe if a similar analysis was conducted for the Cottonwood Allotment, a similar reduction would be needed.

The Forest Service states, in its rejection of the alternatives, that <u>only</u> an increase in water extraction and the addition of new cattle ponds and troughs and a storage tank will fulfill the purpose and need:

In order to improve distribution <u>current water developments are needed</u> <u>as well as what is proposed</u>, so it does not fulfill the purpose and need to remove a currently existing water development for every new development proposed. The existing water developments are necessary and the proposed new developments will help improve the overall distribution of water on several pasture units on the Cottonwood allotment. ¹⁶ [Underlining added for emphasis].

This demonstrates that the purpose and need, intended to encompass a broader purpose of improved cattle distribution and rangelands, is framed so narrowly that it only allows for new water developments to improve those conditions. This is unreasonable and the purpose and need statement must be redrafted to allow for the consideration of other reasonable alternatives.

2. The EA failed to analyze reasonable alternatives and improperly rejected proposed grazing management actions as beyond the scope of the EA.

A. Background

Related to the claim that the purpose and need statement is unreasonably narrow, the Forest Service's consideration of alternatives was also unreasonably narrow, leading the Forest Service to fail to consider reasonable alternatives. Agencies are required to consider "reasonable alternatives" to a proposed action that will accomplish the intended purpose, are technically and economically feasible, and have a lesser impact. An alternative is properly excluded from consideration only if it would be reasonable for the agency to conclude that the alternative does not "bring about the ends of the federal action." We submitted an alternative that is feasible, has a lesser impact on water and

¹⁵ Carter, J., Vasquez, E. and Jones, A. (2020) Spatial Analysis of Livestock Grazing and Forest Service Management in the High Uintas Wilderness, Utah. Journal of Geographic Information System, 12, 45-69. https://doi.org/10.4236/jgis.2020.122003

¹⁶ Cottonwood Range Improvement Comments/Issues Analysis, 14 (hereinafter "Comments Analysis").

 $^{^{17}}$ See Headwaters, Inc. v. BLM, 914 F.2d 1174, 1180-81 (9th Cir. 1990).

¹⁸ City of Alexandria, Va. v. Slater, 198 F.3d 862, 867 (D.C.Cir.1999).

vegetation, and achieves the purpose of improved cattle distribution. But since project alternatives derive from and are bounded by the project's purpose and need statement, the Forest Service refused to consider our alternative, along with the Trust's.

Both alternatives cited and both Carter, et al. and the Trust submitted Holechek, et al.¹⁹ which documented that 30% utilization is both economically sound for a permittee; allows for some measure of recovery of natural resources; and is particularly economically favorable during drought. It is a reasonable means of addressing the overgrazing the EA names as one of the three problems to be addressed, and the drying of some uplands. Conservative utilization places less pressure on the allotment as a whole. For instance, regarding 30% utilization the Holechek, et al. study generally finds that:

... conservative stocking [i.e., ~30%] is one of the surest ways to minimize financial loss from drought (Boykin et al. 1962). Our analysis of the various stocking rate studies indicates on a short term basis (1–5 years), a rancher using conservative stocking [32%] will forego at worst only 10–25% of the profits possible with moderate [43%] stocking. However, when severe drought occurs conservative stocking will give 30–60% higher net returns than moderate stocking. Conservative stocking also has the benefit of increasing grazing capacity through time on degraded rangelands. This benefit was not financially quantified in the various stocking rate studies.²⁰ [Underlining added for emphasis.]

For reference, the 2019 Cottonwood Allotment Annual Operating Instruction permitted up to 60% use.²¹

We also submitted Briske, et al.²² indicating that it is the stocking rate (which would be lower with 25% or 30% utilization), and not rotational grazing, that determines both vegetation condition and animal production. In its scoping comment, the permittee (The Nature Conservancy), which requested that infrastructure be built for its Cottonwood allotment cattle operation, includes a page on grazing management practices that includes the following:

Use riders to actively manage livestock. This provides an active way to move livestock to areas where they can graze more sustainably, and keep them out of areas where/when their presence is less sustainable. 23

¹⁹ Holechek, J, H Gomez, F Molinar, D Galt. 1999. Grazing studies: what we've learned. Rangelands 21(2):12-16

²⁰ Trust Scoping Comments, 11.

²¹ Annual Operating Instruction for Cottonwood Allotment, May 29, 2019, p. 3.

²² Briske, D, J Derner, J Brown, S Fuhlendorf, W Teague, K Havstad, R Gillen, A Ash, and W Willms. 2008. Rotational grazing on rangelands: reconciliation of perception and experimental evidence. *Rangeland Ecology and Management* 61(3_3-17).

²³ The Nature Conservancy scoping comments, February 13, 2018, p.6.

B. The EA fails to give a clear reason for eliminating both alternatives from detailed study and comparison with the EA proposal.

We noted that the stocking rate should be reduced to match current consumption, forage production and a lowered utilization rate. In its rejection of our alternative, the Forest Service states:

The proposed action is not changing the Animal Unit Months (AUMs) that are permitted under the grazing permit and so analysis of climate change in the manner proposed is outside the scope of the proposed actions. ²⁴

Basically the Forest Service is in effect saying "We're not doing your alternative, so your alternative is outside the scope of what we're proposing and so we're not going to analyze climate change." It ignores that it has the ability to reduce stocking in its Annual Operating Instructions without changing the permit.

In its analysis of the alternatives, the Forest Service states that one problem is that parts of the alternatives are the same as the proposed action while other, unidentified components are "outside of the scope." ²⁵ It's not clear whether the EA is trying to say that some parts of the alternative are outside of the scope because they suggest activities that already occur, or because some parts of the alternative are beyond what was intended to be addressed by the EA:

There are parts of this proposed Alternative that are the same as the proposed action while others are outside of the scope or activites [sic] that already occur on the allotment under the current Annual Operating Plans or administrative grazing practices. (Annual Operating Instructions 2009-2019 in project record and FSH 2209.13)²⁶

It is common for different NEPA alternatives to contain some of the same elements. Alternatives need not be wholly different from each other to receive adequate consideration. As for "outside of the scope", the EA is not clear about <u>which</u> elements are considered "outside the scope" or <u>what</u> these unidentified elements are outside the scope of.²⁷

In the EA section, "Alternatives Considered But Eliminated from Detailed Study" the Forest Service rejects both submitted alternatives using three blanket reasons, but fails to indicate which reasons apply to which alternative, or which components of which alternative are the cause of rejection:

As a result of public scoping, two alternatives to the proposed action were submitted. 1. A These alternatives were eliminated from further consideration because 1) components were already addressed by Forest

²⁴ Comments/Issues Analysis p. 14

²⁵ Id.

²⁶ *Id*.

²⁷ *Id*.

Policy, 2) components were similar to the proposed action, or had aspects that did not fall within the scope of the project or 3) did not meet the purpose and need. These alternatives are addressed in more detail in the comment analysis found in the project record (USDA Forest Service 2019d).²⁸

These three reasons for rejection of both alternatives offer no more insight into the Forest Service's determination than the reasons that had been given in the agency's response in Comments/Analysis:

- 1) Components of the submitted alternatives were already addressed by Forest Policy. Which components were already addressed by Forest Policy? What "Forest Policy"? And why would that be a disqualifying factor anyway?
- 2) Components of the two alternatives were similar to the proposed action or had aspects that did not fall within the scope of the project. Which components were similar to the proposed action, and why is that a problem? Which had "aspects" (and what are they?) that "did not fall within the scope of the project" and in what way did they not fall within the scope of the project"?
- 3) The submitted alternatives did not meet the purpose and need. . Which components or alternatives "did not meet the purpose and need" and how did they not meet the purpose and need? If neither alternative meets the purpose and need, it is because the purpose and need has been spelled out so narrowly that only the infrastructure described in the Forest Service's proposal will meet the purpose and need.

Grazing management components cannot be considered beyond the scope of the project because the EA itself calls for some grazing management that is different than current Annual Operating Instructions, i.e., resting Little Dry Mesa 2 out of every 5 years and not using Little Dry Mesa until after August in at least one of the 5 years.²⁹ It should also be noted that the proposed project does not address the entire Cottonwood Allotment (62,448 acres), only a subset of the pastures (23,000 acres). The entire allotment is managed as one unit with several pastures in which the management in one pasture can affect management in all the others. This is demonstrated in the AOI. Failure to analyze the entire allotment is a failure to analyze cumulative effects at the most basic landscape level or to take a "hard look".

The Trust alternative calls for improving water distribution by <u>moving water troughs or creating new cattle ponds</u>, but without increasing the total number of water troughs or cattle ponds. Again, given that the EA proposes putting new cattle troughs in new locations, it is not clear how a proposal to locate water troughs or cattle ponds in new locations would somehow not fall within the scope of the project or not meet the purpose of improving livestock distribution by improving water distribution.

²⁸ EA, 6.

²⁹ EA, 5.

In summary, the EA fails to indicate which components of which of the two submitted alternatives:

- 1) were already addressed by which Forest Policy;
- 2) had aspects that did not fall within the scope of the project; or
- 3) did not meet the purpose and need.

The EA is simply unintelligible in its rejection of both alternatives. It would appear that neither the permittee nor the Forest Service wanted to compare the environmental consequences of two different approaches to cattle distribution and overgrazing issues. Because the Forest Service has chosen not to consider and analyze other reasonable alternatives, and has failed to provide a satisfactory explanation for its decision, the Forest Service must now go back and analyze the alternatives in a supplemental Environmental Assessment or better yet, an EIS that covers a cumulative effects area reflecting its true impacts, or provide an adequate explanation why it will not do so.

Furthermore, Alternative 1, the No Action Alternative merely perpetuates the existing management situation which is leading to degradation of upland and riparian areas, native plant communities and soils, and fish and wildlife habitat. Recall the Forest Plan assessment of Fair or Poor Condition on 85% of the Forest's suitable lands. The lack of a No Grazing Alternative allows the Forest Service to avoid disclosing current conditions and projected conditions from its alternatives in comparison to natural, potential, or climax conditions that could exist in the Cottonwood Allotment as well as how recovery of the ecosystem would take place in the absence of livestock. The EA should have analyzed a No Grazing Alternative. The EA did not disclose site-specific and allotmentwide impacts of the topographic limitations, current suite of ponds, troughs and springs on habitat and cattle distribution when added to the proposed new troughs and ponds. It did not disclose conditions at and the number of seeps and springs on the allotment. While citing two references, (Ganskopp, 2001 and Bailey, 2004) as justification for these new developments, those papers did not address how conditions changed at the existing problem areas. A recent study (2017) showed that upland water and deferred rotation grazing systems did not alleviate grazing use in riparian and meadow areas while increasing use in the uplands.³⁰ The areas of current springs and water developments will continue to be used and there is no evidence provided in the EA and specialists reports to demonstrate otherwise.

The public is entitled to see a comparison of the environmental consequences of the alternatives versus digging seven new cattle ponds, adding two new water troughs, laying 2,800 feet of pipe, and extracting and storing 5,000 gallons of water for cattle from a spring. The public deserves this in part because these are national, public lands and in part because the public is paying ~90% of the costs for this project that was requested by the private permittee. In response to a question about the costs of the

³⁰ Carter, J, J Catlin, N. Hurwitz, A Jones, J Ratner. 2017. Upland water and deferred rotation effects on cattle use in riparian and upland areas Rangelands (39)3-4): 112-118. Doi 10.1016/j.rala.2017.06.003

proposed project and who is paying for those (since this information was not included in the EA), Responsible Official Tina Marian responded:

The WRI [Watershed Restoration Initiative] grant we applied for was received. It is project 5066 in the WRI database. We got 35,479 from WRI to pay for materials for the fences, cattle guard, pond construction and CCYC [Canyon Country Youth Corps] crew time to help build the spring exclosures and small section of fence. The TNC [The Nature Conservancy, the permittee] is contributing about 3300, the FS about 3600, with about 1500 of it for the use of our skidsteer to set posts the rest of it in time for my crew to be working with the CCYC crew, this be may less if we do not get the NFF [National Forest Foundation] grant that the Four Corners School applied for. If that is the case, the TNC will have to cover the labor [but not the materials] to build the spring exclosures and the .2 miles of fence.³¹

3. The EA fails to discuss climate change impacts on the uplands to which cattle will be drawn for feeding.

Among the core purposes of NEPA is the goal to "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." 32 Climate change is a fundamental environmental issue, and its effects fall under the scope of NEPA. NEPA recognizes "the profound impact of man's activity on the interrelations of all components of the natural environment." 33 The Forest Service has failed to take into account, disclose, and assess the potential effect that climate change may have on the project area, the allotment as a whole, or the Manti Lasal NF especially on the upland areas to which livestock will be drawn, the springs and seeps and water delivery to downstream areas that affect TES species.

The EA indicates that "limited sources of water" amid drought and temperature increase are creating the supposed need to provide additional water sources in order to draw the permittee's cattle away from overgrazed wetlands and riparian vegetation to "areas less sensitive to use, such as upland areas." However, the potential environmental effects for those upland areas due to increased cattle use were not assessed but rather dismissed, without citing any evidence that they are "less sensitive to use."

In our scoping comments, we cited Carter, et al.³⁵ documenting in a Utah allotment that water developments increased upland utilization and did not relieve pressure on riparian and associated meadow areas. From public scoping comments, the Forest Service was provided with multiple sources on climate change impacts relevant to the Manti-La Sal NF and Cottonwood allotment uplands.

³¹ Email communication with Mary O'Brien, February 13, 2020.

³² 42 U.S.C. 4321.

^{33 42} U.S.C. 4331(a).

³⁴ EA, 2.

³⁵ Carter et al, op cit., p11.

These sources describe how climate change (particularly heat, drought, and altered seasonal precipitation regimes) degrades uplands conditions, including reduced productivity, reduced species biodiversity, increased invasive species, loss of biological soil crust, and conversion to shrubland (i.e., degradation of uplands). The articles also document how livestock grazing interacts with these climate change impacts.

Among the sources provided were:

- Climate change and ecosystems of the southwestern United States. Rangelands 30:23–28.
- Climate change impacts on northwestern and intermountain United States rangelands. Rangelands 30:29–33.
- Elephant in the room: Livestock's role in climate and environmental change. Michigan State Journal of International Law 22:1–28.
- Climate variability and change in the drylands of western North America. Global and Planetary Change 64:111–118.
- Sensitivity of the Colorado Plateau to change: climate, ecosystems, and society. Ecology and Society 13:28.
- Plant species richness and ecosystems multifunctionality in global drylands. Science 335:2014–2017.
- Assessing the response of terrestrial ecosystems to potential changes in precipitation. BioScience 53:941-952.
- Range shifts under future scenarios of climate change: dispersal ability matters for Colorado Plateau endemic plants. Natural Areas Journal 35:428–438.
- On the brink of change: plant responses to climate on the Colorado Plateau. Ecosphere 2:1-15.
- Rangeland monitoring reveals long-term plant responses to precipitation and grazing at the landscape scale 69:76–83.
- Long-term decline in grassland productivity driven by increasing dryness. Nature Communications 6:7148.
- Estimating climate change effects on net primary production of rangelands in the United States. Climatic Change 126:429–442.
- An ecosystem in transition: causes and consequences of the conversion of mesic grassland to shrubland. BioScience 55:243-254.
- Sediment losses and gains across a gradient of livestock grazing and plant invasion in a cool, semi-arid grassland, Colorado Plateau, USA. Aeolian Research 1:27–43.

However, neither these studies nor the climate change-associated impacts they documented were mentioned in the EA. The EA never mentioned impacts of drought and heat on the upland vegetation to which the permittee's cattle will be drawn by excavating cattle ponds and piping water to two additional water troughs. These uplands, which otherwise lack water, are merely referred to as "areas less sensitive to

use," with no scientific evidence to support this contention.³⁶ The EA mentions "climate change" only once, and only in relation to the three springs at which fences would be constructed to halt cattle damage, and from which water would be piped to the cattle.³⁷

One study provided was undertaken on the Manti-La Sal NF using remotely-sensed vegetation greenness data (LANDSAT Normalized Difference Vegetation Index).³⁸ The study found an overall decline in vegetation productivity from 1986-2011 and an average negative value for change in productivity in all Manti-La Sal vegetation types. The EA never discussed whether subsidizing of cattle consumption of the upland vegetation with water catchments, troughs and a storage tank might have significant impacts that are cumulative with the increasing heat and drought of climate change. Instead, the EA focused on the resistance and resilience that would be provided to springs from which the cattle would be entirely excluded.³⁹

The only Forest Service response to climate change scoping comments is one unintelligible sentence and a second that speaks to the decision to tolerate no alternatives to what is being proposed:

The project is designed to improve the resistance and resilience of the springs and wetlands proposed from management from climate change disturbance factors. The decision of whether grazing in the allotment is not appropriate at this time is outside the scope of the purpose and need and the proposed action for this analysis.⁴⁰

It is reasonable to ask whether grazing that, amid increasing temperature, is requiring ever more water extraction and infrastructure should perhaps be adjusted. To simply state that considering anything other than business-as-usual grazing and the addition of infrastructure runs counter to the spirit and law of NEPA.

The EA does indicate that ". . . production in the [Big Flat unit] area is lower than expected based on the soils that occur in the area" and cites to the Specialist Report for Vegetation and Rangeland Resources⁴¹. This report cites no data but simply makes the statement twice, once in relation to a photo of one utilization cage in one portion of the Big Flat pasture that shows vegetation growth inside and grazed vegetation outside the cage, and repeats the claim for that one area of Big Flat pasture on the next page. There is no analysis of long-term trend of species and production. The EA states:

The pastures are managed on the basic principles of plant response to grazing which considers the frequency, intensity, and opportunity for growth or regrowth of range vegetation in grazing management (Reed et

³⁶ EA, 3.

³⁷ EA, 2.

³⁸ Hoglander C. 2014. Changes in Vegetation Productivity for Three National Forests in Utah, 1986-2011: Dixie, Fishlake, and Manti-La Sal National Forests. Grand Canyon Trust. Unpublished Document. ³⁹ EA, 2.

⁴⁰ Comment/Issues Analysis, 11.

⁴¹ Specialist Report on Vegetation and Rangeland Resources, pp. 6 and 7.

al, 1999). These principles are still used whether there are improvements made to water distribution or not, but are better implemented with good water distribution.⁴²

There is no analysis of the Grazing Response Index (Reed et al 1999) factors used for each pasture, the allotment as a whole, or evaluations of the outcomes, or for that matter, how exactly is it applied to the AOIs or management.

The following email exchange with Responsible Official Tina Marian indicates that the FS has not analyzed production data regarding Cottonwood Allotment:

[Question asked by Grand Canyon Trust]:

The EA (p. 6) states that "production" is "lower in the area than is expected based on the soils" in the areas where use is "higher." The Rangeland Specialist report seems to base "expected production" on visual observation of utilization cages that have been placed in areas that had been grazed the previous year.

- · Is "expected" production based on anything other than utilization cages placed on sites that were grazed the previous season?
- The NDVI report for 1986-2011 we submitted during scoping comments in 2018 indicated that production has declined on the Monticello District. Does the Forest have any data to the contrary?

[Answer by Tina Marian (FS)]:

We have range trend data that recorded production values from the 1970s to the earlier 2000s and from about 2013 to 2019 we have some years of production data using cage clippings. I have not fully analyzed this data for trends in forage production for the allotment.⁴³

The Forest Service's proposal to draw cattle to areas that have not been grazed heavily due to lack of water sources has not included an analysis of whether production has declined, perhaps due to the drought and heat that have made water less reliable on Little Dry Mesa, or the grazing intensity and lack of rest superimposed on these factors. This analysis of forage production would seem timely and an essential element of this project.

As exemplified, the Forest Service failed to disclose, consider, or discuss the impacts that climate change and its effects, in combination with the current and newly introduced livestock grazing, will have on the uplands where cattle are proposed to be moved, or for that matter, the allotment as a whole. This is also a failure to take the "hard look" required by NEPA.

⁴² EA, 9

⁴³ Email communication with Mary O'Brien, February 26, 2020.

4. The project fails to protect TES species

A. Background

The EA cited the status and determination for effects to Threatened or Endangered Species, but provided no analysis in the EA. The determination for threatened Mexican Spotted Owl and Southwestern Willow Flycatcher was "may affect, not likely to adversely affect". The determination for Endangered Bonytail Chub, Colorado Pikeminnow, Humpback Chub and Razorback Sucker (Colorado River Fish) was "may affect, likely to adversely affect". The EA also lists three sensitive plant species that "may be impacted by ground disturbing activities of pond construction or the grazing use of livestock in the Little Dry Mesa area." Those species are:

- 1. Kachina Daisy (Erigeron kachinensis)
- 1. Chatterley Onion (Allium geyeri var chatterleyi)
- 2. Pinnate Spring-parsley (Cymopterus beckii)

The Forest Service definition of a sensitive species is:

Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by:

- a. Significant current or predicted downward trends in population numbers or density.
- b. Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.⁴⁶

Forest Service objectives for designated sensitive species include:

- 1. Develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions.
- 2. Maintain viable populations of all native and desired nonnative wildlife, fish, and plant species in habitats distributed throughout their geographic range on National Forest System lands.
- 3. Develop and implement management objectives for populations and/or habitat of sensitive species.⁴⁷

⁴⁴ EA. 17.

⁴⁵ EA, 13.

⁴⁶ Forest Service Manual 2670.5, 19.

⁴⁷ Forest Service Manual 2670.22.

The EA indicates that increasing cattle use of the Little Dry Mesa by excavating a cattle pond there may negatively impact these species, but the water will benefit use of the forage out there by livestock and "some" (unidentified) wildlife species:

The Kachina Daisy and Pinnate Spring-Parsley's association with rocks protects them from most livestock grazing and trampling. The proposed design features and monitoring plan are expected to minimize impacts to these sensitive plant populations, and the determination is that the proposed action may impact individuals or their habitat, but will not likely contribute to a trend toward federal listing or loss of population viability due to the small amount of occupied habitat potentially impacted (USDA Forest Service2019a). While expected impacts are minimized by the design features and will be monitored, risk is not fully eliminated and sensitive plant populations may be negatively impacted by providing livestock water to the area. However, water availability will benefit livestock and some wildlife species by enabling use of the high forage production on the mesa.

Cumulative Impacts

.. . .

Cumulative impacts are not expected because current and future vegetation management projects are typically designed to avoid or enhance sensitive species habitat. These plant species are associated with rock outcroppings and rims which are not impacted by recreationists who mainly use roads and trails.⁴⁸

The Biological Evaluation/Wildlife Report similarly states that Kachina Daisy is found in rock outcrops:

This species is widely scattered across the Monticello District, and occurs in the Cottonwood allotment. It is known to occur on the Chippean Rocks and on Little Dry Mesa, in moist pockets associated with north and east exposures on sandstone cliffs and outcroppings. While the species association with rocks protects it from most livestock grazing and trampling, there may be indirect impacts from the changes in livestock use of the area.⁴⁹ [Underlining added for emphasis.]

B. The EA fails to protect Kachina Daisy and Chatterley Onion

1. Kachina Daisy

The EA claim that "The Kachina Daisy . . . association with rocks protects them from most livestock grazing and trampling" is factually incorrect.⁵⁰

⁴⁸ EA, 13-14.

⁴⁹ Smith, Barbara. Biological Evaluation/Wildlife Report for Cottonwood Improvements Project EA, (March 18, 2019).

⁵⁰ EA, 13.

In the past it was believed that Kachina Daisy was restricted to hanging gardens but a study by Allphin et al. 1995 documented three distinct populations of Kachina Daisy: (1) in hanging gardens of Cedar Mesa; (2) a related population in Colorado (Dolores River) also in hanging gardens; and (3) a distinct population in the higher elevation of Elk Ridge and the Abajo Mountains that is likely a different variety. As noted in the abstract for Allphin, et al.:

As originally described, *Erigeron kachinensis* (Asteraceae) was a category 2 species endemic to hanging garden communities in the Colorado Plateau region of southeastern Utah. Two new races of *E. kachinensis* have recently been discovered. One grows in hanging gardens along the Dolores River in Colorado and is morphologically differentiated from typical materials collected at Natural Bridges National Monument. <u>Another grows on exposed substrates at high elevations on Elk Ridge in southeastern Utah. It is morphologically similar to type materials but occupies a different habitat.⁵¹ [Underlying added for emphasis.]</u>

According to Loreen Allphin, the higher elevation variety definitely grows in areas where livestock would be active.⁵² She said all of these populations are very small and therefore vulnerable. A photograph of Kachina Daisy growing in soil, not just rocks or cliffs is in Figure 2.

⁵¹ Allphin, L, M.D. Windham and K.T. Harper. 1995. A genetic evaluation of three potential races of the rare Kachina Daisy. *Southwestern Rare and Endangered Plants: Proceedings of the Second Conference*. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station. General Technical Report RM-GTR-283.

⁵² Personal communication between Loreen Allphin and Marc Coles-Ritchie, February 21, 2020.

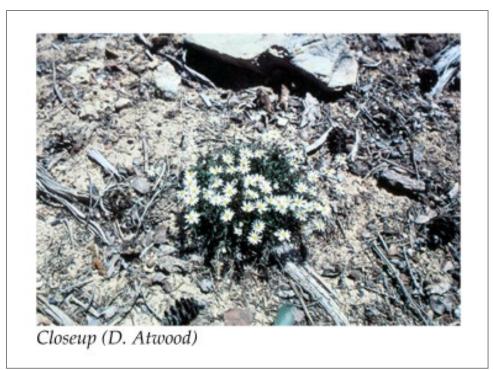


Figure 2. Kachina Daisy photo from UNPS Rare Plant webpage (UNPS 2020).

Little Dry Mesa was surveyed seven years ago (2013) for Kachina Daisy, and the survey notes, "Seems restricted to cracks in rock faces assoc. with ponderosa" (TES Element Occurrence, Survey ID 04`004S13002). Two photographs followed, showing the plant protected within rock cracks (Fig. 3)



Figure 3. Kachina Daisy growing in a rock crack. Element Occurrence survey 5/20/2014. Survey ID 04`004S13002)

The Allphin, et al. documentation of Kachina Daisy in the open on Elk Ridge indicates that the observation that Kachina Daisy grows only in rock cracks on Little Dry Mesa may very well be due to the extirpation of Kachina Daisy from the grazed flats of Little Dry Mesa, with sole protection currently found in rock cracks.

We did not find the Allphin, et al. research on Kachina Daisy during the 30 days we had for scoping comments in February 2018, but Allphin, et al. (1995) is a Forest Service publication that should have been part of the Manti-La Sal NF assessment of this forest sensitive species. Regardless, the Forest Service would not be proceeding with its proposed action under the best scientific evidence unless it takes into account the findings of the Allphin study.

2. Chatterley Onion

In the Affected Environment section, the EA (p. 8), indicates Chatterly Onion is out in the open on Little Dry Mesa:

Chatterley Onion is known to occur in open, sandy pinyon/juniper, mountain brush and ponderosa pine habitat in and around the project area on Little Dry Mesa.

In the Intensity section, the EA indicates Chatterley Onion could be impacted by the proposed project: "... Chatterley Onion ... may be impacted by ground-disturbing activities and changed cattle distribution, especially in the Little Dry Mesa area." ⁵³

When, seven years ago, the Forest surveyed Little Dry Mesa for sensitive plant species, it found Chatterley Onion for the first time (i.e., a "new Element Occurrence"). The survey counted 850 Chatterley Onion plants, and wrote "grazing on the *Allium* [i.e., Chatterley Onion]" (TES Plant Element Occurrence Survey ID 041004513002).

Thus, Chatterley Onion is present in the open on Little Dry Mesa; it almost certainly will be grazed by cattle purposely drawn to Little Dry Mesa by excavating a new cattle pond; and yet it is a species "for which population viability is a concern." 54.

If our alternative calling for no new water developments were to be compared with the proposed plan to draw cattle into Little Dry Mesa with a cattle pond, the consequences would be quite different for Kachina Daisy and Chatterley Onion. The Forest Service has made no comparison of its proposal with either our alternative or the Trust alternative, or a No Grazing Alternative, nor has it analyzed the entire Cottonwood Allotment, depriving the public of useful information and a full disclosure of cumulative impacts of livestock grazing to the ecosystem within the Cottonwood Allotment.

C. The EA fails to protect Mexican Spotted Owl

The Biological Assessment (BA) discusses Mexican Spotted Owl (MSO), showing it has critical, protected and restricted habitat within the Cottonwood Allotment. The BA states that MSO forage primarily on canyon floors, benches and mesa tops for rodents, bats and birds. ⁵⁵ There are 57,230 acres of designated critical habitat within the Cottonwood Allotment, of which, cattle can access most. [Note that this is 91.6% of the allotment area]. Then, citing the Forest Service expectation that the improvements would have beneficial effects to range condition and trend, the BA concludes that these proposed changes would "not adversely affect habitat, especially that normally used by owls. ⁵⁶

As we described the failure of the EA to analyze condition, trend, species, grazing capacity and utilization in this objection, the BA had no apparent, evidence-based reason for drawing its conclusion. It did not analyze the entire allotment and the habitat conditions resulting from livestock grazing and the

⁵³ EA, 16.

⁵⁴ Forest Service Manual 2670.5, 19.

⁵⁵ USDA Forest Service. 2018a. Smith, Barbara. Biological Assessment for Cottonwood Improvements Environmental Assessment. July 20, 2018. BA, 8, Map 5, Map 6. ⁵⁶ BA, 9,

totality or cumulative effects created by all the range improvements, ponds, and troughs as well as degradation of natural streams, springs and seeps and their associated wetland/riparian areas. It did not analyze the effects of construction or noise on breeding and foraging. The degradation of these habitats can affect the forage base of MSO which the BA indicates are rodents, bats and birds. The Forest Service has not considered the cumulative effects of fires, the past or proposed vegetation treatments, timber projects, and burns that have occurred or will occur in the area and could alter or destroy MSO breeding or roosting habitat as well as foraging habitat. We downloaded the GIS files from the Manti LaSal website and the file named "Activity Polygon" has an associated file that lists numerous projects that would alter habitat for MSO. This was not incorporated into the analysis.⁵⁷

D. The EA fails to protect the Four Colorado River Fish

The BA acknowledges that the four endangered Colorado River Fish are present in river system drainages receiving water from the Manti LaSal National Forest and that flow alterations have changed the "turbidity, volume, current speed and water temperatures have had negative impacts on the species." The proposed action includes a water depletion of 1.82 acre-feet per year from the Colorado River Basin. This constitutes a small depletion of less than 100 acre-feet.⁵⁸

The Biological Opinion notes that any water depletion will "jeopardize their continued existence and will likely contribute to the destruction or adverse modification of their critical habitat." It then discusses the 1988 Recovery Program which, with subsequent agreements, establishes a financial contribution to the Recovery Program for water depletions to fund recovery activities and will serve as conservation measures that minimize adverse effects to listed species or critical habitat and "Therefore we no longer consider depletions to jeopardize the continued existence of these species, but rather believe that depletions may affect and are likely to adversely affect the species." [Emphasis added].⁵⁹

The analysis of only these proposed water developments in these three pastures without including the cumulative effects for all the developments in the entire Cottonwood Allotment as well as the entire Manti LaSal National Forest (MLNF) is a failure under NEPA to analyze cumulative impacts. Furthermore, as is well documented, livestock grazing compacts soils, reduces plant cover and alters hydrology.

 $^{^{57}\,\}underline{https://www.fs.usda.gov/detailfull/mantilasal/landmanagement/gis/?cid=STELPRDB5292391\&width=full}$

⁵⁸ BA, 11 - 12.

⁵⁹ Fish and Wildlife Service. 2018. Biological Opinion for the Cottonwood Range Improvements Project.

A meta-analysis of the effects of cattle grazing on arid ecosystems in western North America found reductions in rodent species diversity and richness; vegetation diversity; shrub, forb and grass cover; total vegetation cover and biomass; seedling survival; biological crust cover; and litter cover and biomass while soil bulk density increased, soil erosion increased, and infiltration rates decreased in grazed areas when compared to ungrazed areas.⁶⁰ A review of ecosystem effects of livestock grazing in western North America found that livestock grazing reduces levels of biodiversity, leads to decreased population densities for a wide variety of taxa, disrupts ecosystem functions, including nutrient cycling and succession, changes community organization, and changes the physical characteristics of both terrestrial and aquatic habitats. 61 A similar review of livestock effects to streams and riparian ecosystems determined 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. No positive environmental effects of grazing were found in this comprehensive survey of the literature. 62

In a recent report of the Recovery Program, the US Fish and Wildlife Service summarized the current status of these fish. ⁶³ Colorado pikeminnow populations are in a declining trend. ⁶⁴ Bonytail chub survival is low. ⁶⁵ Razorback suckers are not meeting stocking goals. ⁶⁶ Humpback chub populations have declined and remain low. ⁶⁷ . A study of the relationship of different habitats with flow changes in the Colorado River demonstrated the habitat loss with loss of flow and that some specialized habitats used by juvenile fish such as Colorado pikeminnow have critical thresholds of flow below which they disappear or are greatly reduced. ⁶⁸

The loss of watershed function, alteration and depletion of flows and its effects on these four Colorado River Fish also needs to be analyzed for the project area, the entire Cottonwood Allotment and the entire Manti LaSal National Forest. The alteration in flow and habitat in the Colorado River and its tributaries occupied, or potentially occupied by these four endangered species, must be

⁶⁰ Jones, A. (2000) Effects of Cattle Grazing on North American Arid Ecosystems: A Quantitative Review. Western North American Naturalist, 60, 155-164.

⁶¹ Fleischner, T. (1994) Ecological Costs of Livestock Grazing in Western North Ameri-ca. Conservation Biology, 8, 629-644. https://doi.org/10.1046/j.1523-1739.1994.08030629.x

⁶² Belsky, A.J., Matzke, A. and Uselman, S. (1999) Survey of Livestock Influences on Stream and Riparian Ecosystems in the Western United States. Journal of Soil and Water Conservation, 54, 419-431.

⁶³ USFWS. 2016. 2015 - 2016 Highlights. Upper Colorado River Endangered Fish Recovery Program and San Juan River Basin Recovery Implementation Program.

⁶⁴ Highlights, 18.

⁶⁵ Highlights, 19.

⁶⁶ Highlights, 20.

⁶⁷ Highlights, 21.

⁶⁸ Carter, J., Valdez, R., Ryel, R., and Lamarra, V. 1985. Fisheries Habitat Dynamics in the Upper Colorado River. Journal of Freshwater Ecology 3(2):249 - 264.

accounted for by all activities in the MLNF, including livestock grazing and the large number of vegetation treatments, timber projects, roads, and other surface disturbing activities. In association with this alteration in flow and habitat, the analysis should also include the Southwestern Willow Flycatcher.

5. The EA emphasizes benefits while ignoring adverse impacts

NEPA requires that agencies disclose and analyze the direct and indirect impacts of the project, along with any cumulative impacts, whether those impacts be beneficial or adverse.⁶⁹ The EA fails (with one exception) to indicate any adverse impacts of the proposed project. The exception is the Biological Assessment, which provides steps for analysis that require indicating whether a project "may affect" Threatened, Endangered, or Sensitive Species. Having followed those steps, the Biological Assessment concludes that the project will likely adversely affect four endangered fish and "may impact" three sensitive plant species, and six sensitive wildlife species.⁷⁰

The EA is not accurately reporting environmental consequences if, in its effort to undertake a project, it fails to describe the range of environmental consequences and impacts. The following are examples:

1. The EA mentions climate change only once, claiming that the proposed action will improve the "resistance and resilience to climate change" of the three springs where cattle will be fenced out but fails to mention potential reduction of resistance to climate change on Little Dry Mesa to which cattle will be drawn by excavating a cattle pond.⁷¹

Our scoping comments noted that the scoping notice points out that summer precipitation has become more erratic and seasonal water sources are no longer reliable for cattle in the uplands, but the role of climate change, which the livestock grazing exacerbates, was not mentioned in relation to the uplands. The EA did not mention the cumulative effects of livestock grazing with climate change.

- 3. The EA mentions that the springs will have increased quantity and quality of water by fencing the cattle out, but fails to mention the reduced availability of water on Little Dry Mesa due to excavating and lining with clay a cattle pond where water will evaporate, and that water quality will be compromised by cattle walking in and defecating in the pond.
- 4. The EA mentions pollinators only in relation to the springs that will exclude cattle, but it does not acknowledge the loss to pollinators by cattle

⁶⁹ 40 C.F.R. §§ 1508.7, 1508.8.

⁷⁰ Biological Assessment for the Cottonwood Improvements Environmental Assessment, p. 14 ⁷¹ EA, 2.

grazing on forbs (e.g., wildflowers) where they have not previously been grazing much.

6. Suggested Remedies

The cumulative effects of this proposed project and its integral relationship to the entire Cottonwood allotment and the Manti LaSal NF as regards flow depletions and alterations affecting the Colorado River Fish, impacts to riparian and upland areas within the Forest that may affect MSO and Southwest Willow flycatcher, and the sensitive plant species dictate the need for an EIS. An EIS is needed to analyze these widespread impacts from water projects/diversions for livestock and other purposes; alteration of watershed function and vegetation communities from livestock grazing, vegetation manipulation, fire, and roads; all of which combine to reduce/alter habitat and flow regimes within and downstream of the Forest. These effects cry out for a comprehensive, Forest-wide analysis and new decision to address these issues.

A part of that analysis would be to follow the example of the study by Carter et al (2020) cited herein. That analysis of capability and stocking rate used current Regional capability criteria, current forage production and forage consumption rates for livestock. The Forest Service has indicated it has forage production data for the Cottonwood allotment that is current as well as their historical data that could be used in this analysis. The Trust also provided the vegetation study cited herein that showed declining production in the Forest from 1986 - 2011.

Remedies that would resolve the objection:

A commitment from the Manti Lasal NF for the preparation of the EIS and analysis within a defined time frame.

In the interim period for the EIS, for the entire Cottonwood allotment, a new Environmental Assessment should be prepared. This should offer a purpose and need that allows reasonable alternatives such as No Grazing and Reduced Stocking based on a current capability and stocking rate analysis to be considered and that include actions other than construction of infrastructure.

Include in that analysis the current forage production, current livestock and wildlife forage consumption rates, a utilization limit of 30%, protection of Little Dry Mesa from (1) excavation of a cattle pond in response to increasing lack of water and rising temperature, and (2) resulting increased livestock use due to the addition of the cow pond.

The Nature Conservancy and Manti Lasal NF adjust the Annual Operating Instructions to implement 30% utilization beginning in 2020, monitor and maintain that until the new EA and Decision is finalized.

I, John Carter, request a meeting by phone with the Responsible Official Tina Marian; and, if he is willing, Dave Livermore of The Nature Conservancy; signatories of this Objection; and other representatives of the Forest Service as the Forest Service wishes.

Sincerely,

John G. Carta

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