June 24, 2013

The Honorable Daniel M. Ashe
Director
U.S. Department of Fish and Wildlife Service
Public Comments Processing,
Attn: FWS-R8-ES-2012-0100
Division of Policy and Directives Management
U.S. Fish and Wildlife Service;
4401 N. Fairfax Drive, MS 2042–PDM;
Arlington, VA 22203.

The above listed organizations appreciate the opportunity to comment on the proposed listing of the Sierra Nevada yellow-legged frog and the northern distinct population segment of the mountain yellow-legged frog as well as the Yosemite toad under the Endangered Species Act as published in the Federal Register on April 25, 2013. As organizations that represent both agriculture and the rural counties that support it, we must **oppose** this listing for both the irreparable damage that will be done to local economies included in the proposed critical habitat, as well as the insufficient and misleading science that was used to support the listing.

The Rural Counties Representatives of California (RCRC), in combination with the California Farm Bureau Federation (CFBF), the California Cattlemen's Association (CCA), the California Wool Growers Association (CWA), the Public Lands Council (PLC), and the National Cattlemen's Beef Association (NCBA) represent nearly three million Californians with members in every county in the state. Cumulatively, our membership either resides in or manages nearly 50% of the state's land, making our organizations particularly concerned with the potentially negatively impact of this proposal.

Sierra Nevada Yellow-Legged Frog and Northern Distinct Population Segment of the Mountain Yellow-Legged Frog

Listing Comments:

We appreciate the extensive work that was done in determining the potential threats to the species, but must request that the United States Fish and Wildlife Service (USFWS) rely solely on the evidence provided by the best available science, and not attempt to link other unproven actions to the decline of the species. The listing clearly identifies disease and fish stocking as the major threats affecting the viability of the Sierra Nevada yellow-legged frog population, and yet, despite acknowledgement of these threats, the listing simultaneously dismisses and supports grazing as a potential threat. Sentences such as "physical habitat destruction does not appear to be the primary actor associated with the decline of mountain yellow-legged frogs"[1] are followed by comments like "[a]s discussed below, grazing reduces the suitability of habitat for mountain yellow-legged frogs by reducing its capability to sustain frogs and facilitate dispersal and migration, especially in stream areas. The impact of this stressor to mountain yellow-legged frogs is ongoing, but of relatively low importance as a limiting factor on extant populations."[2]

Despite the repeated statements that livestock grazing is an unlikely factor in the declining population, the listing also cites material which notes that

> Grazing of livestock in riparian areas impacts vegetation in multiple ways, including soil compaction, which increases runoff and decreases water availability to plants; vegetation removal, which promotes increased soil temperatures and evaporation rates at the soil surface; and direct physical damage to the vegetation (Kauffman and Krueger 1984, pp. 433-434; Cole and Landres 1996, pp. 171-172; Knapp and Matthews 1996, pp. 816-817). Streamside vegetation protects and stabilizes stream banks by binding soils to resist erosion and trap sediment (Kauffman *et al.* 1983, p. 683; Chaney *et al.* 1990, p. 2). Removal of vegetative cover within mountain yellow-legged frog habitat decreases available habitat, exposes frogs to predation (Knapp 1993b, p.1), and increases the threat of desiccation (Jennings 1996, p. 539).[3]

While livestock may cause some of the impacts that are included in the previous citation, those impacts are localized and therefore are likely not a limiting factor to frogs.

Further these statements are based on outdated data on the impacts of grazing to the ecosystem. Most references are from the time period 1980-2000. In 2011, 40 scientists published a comprehensive review of the effectiveness of grazing and range management-conservation practices to sustain and conserve riparian areas, habitat, water quality and a suite of ecosystem functions and services. [4]In particular, this peer-reviewed literature synthesis clearly demonstrates that modern range and grazing management practices, as currently conducted on USFS grazing allotments, are compatible with riparian enhancement. [5] These current findings, based on the entirety of

---

[1] Endangered and Threatened Wildlife and Plants: Endangered Status for the Sierra Nevada Yellow-legged Frog and the Northern Distinct Population Segment of the Mountain Yellow-legged Frog, and Threatened Status for the Yosemite Toad (Proposed Rule)." Federal Register 50 CFR 17 (April 25,2013) p24480.

[2] Ibid., 24482

[3] Ibid.,24483

4 Briske, D. D. 2011. Conservation benefits of rangeland practices: assessment, recommendations, and knowledge gaps. Lawrence, KS: United States Department of Agriculture, Natural Resources Conservation Service. 429 p.

5 George, M., R. D. Jackson, C. S. Boyd, and K. W. Tate. 2011. A scientific assessment of the effectiveness of riparian management practices. In: D. D. Briske (ED.). Conservation benefits of rangeland practices: Assessment, recommendations, and knowledge gaps. Lawrence, KS: Allen Press. p. 213-252.

the published literature on this topic up to 2011, clearly demonstrate that the concerns raised about the impacts of livestock grazing to stream and meadow hydrology, etc are more appropriately associated with grazing management practices of past decades, and do not reflect current practices.

USFWS should also consider that Roche et al. (2012a and 2012b) reference and discuss multiple published studies which also found no significant relationship between extensive cattle/livestock grazing and amphibian habitat. This additional information should be included in this review and resulting decision.

The statements of analysis, coupled with the science cited, are contrarian and confusing, coupled with the lack of inclusion of current scientific understanding , appear only to serve the purpose of listing grazing as a threat to the species. It is unclear why, if the USFWS has no evidence to support attributing grazing to the decline in the yellow-legged frog population, the listing document repeatedly cites the potential for it.

The USFWS should rely only on the factors that have been plainly demonstrated to be the major drivers in the declining population- disease and trout stocking. An analysis of how disease and fish stocking may be mitigated in a way that will result in the stabilization and ultimate growth of the population. Given the repeated assertions made about the negative effects of grazing, it seems possible that, should the species be listed as endangered grazing could be removed from U.S. Forest Service grazing allotments through the Section 7 consultation process. For this reason, we request that grazing be removed as a potential threat to the species, so as to limit unnecessary impacts to grazing in the Sierra Nevada region. Instead the USFWS should focus its efforts on addressing the primary factors impacting the species – disease and trout stocking.

The proposed rule also fails to acknowledge existing regulatory protections for both *Rana sierrae* and *Rana muscosa*. As of April 1, 2013, both species are listed under California's Endangered Species Act (CESA). This protection is similar to federal ESA protection through its prohibition of take of listed species. The proposed rule recognized that the species were candidates under CESA and California's Fish and Game Commission had granted take authorizations as allowed under California Law (Fish and Game Code Section 2084) for candidate species. Now that both are officially listed, blanket take authorizations are no longer allowed and activities must be granted individual take authorizations, which require that any take be *incidental to an otherwise lawful activity* and be *minimized and fully mitigated* (Fish and Game Code Section 2081). This change in existing regulatory protections for the species brings up the question of whether an additional listing is necessary and whether it would provide additional protections the species are not already receiving.

Critical Habitat:

The USFWS proposes to designate as critical habitat approximately 1,105,400 acres for the Sierra Nevada yellow-legged frog in Butte, Plumas, Lassen, Sierra, Nevada, Placer, El Dorado, Amador, Calaveras, Alpine, Mariposa, Mono, Madera, Tuolumne, Fresno and Inyo Counties. For the northern DPS approximately 221,498 acres in Fresno, and Tulare Counties is proposed as critical habitat. Additionally, 750,926 acres of critical habitat in Alpine, Tuolumne, Mono, Mariposa, Madera, Fresno, and Inyo Counties is proposed for the Yosemite toad.

The proposed designation of critical habitat for these species would negatively impact, at a minimum, the agricultural and recreational industries in these 17 rural counties and their small communities. The agricultural activity most impacted by the listing of these species and the designation of critical habitat is cattle grazing. The recreational activity most impacted by the listing of these species and critical habitat designation is likely to be recreational fishing and related tourism. Both agriculture and tourism are important components of the rural economy.

Utilizing recreational fishing data as an example of the potential negative impact on the local economy of these counties, the USFWS 2011 National Survey for California found that 1.7 million anglers (92 percent of all sport

fishermen) fished in California. Of this total, 1.6 million were state residents and 98,000 were nonresidents. Anglers fished a total of 23.8 million days in California, an average of 14 days per angler. State residents fished 23.3 million days, 98 percent of all fishing days. All fishing-related expenditures in California totaled $2.3 billion in 2011. Trip-related expenditures, including food and lodging, transportation, and other expenses totaled $1.6 billion – 71 percent of all fishing expenditures. Expenditures for food and lodging were $576 million and transportation expenditures were $463 million. Other trip expenses, such as equipment rental, bait, and cooking fuel, totaled $581 million. Each angler spent an average of $965 on trip-related costs during 2011.

Anglers also spent $577 million on equipment in California in 2011, 25 percent of all fishing expenditures. Fishing equipment (rods, reels, lines, etc.) spending totaled $321 million, 56 percent of the equipment total. Auxiliary equipment expenditures (tents, special fishing clothing, etc.) and special equipment expenditures (boats, vans, etc.) amount to $257 million, 44 percent of the equipment total. The purchase of other items, such as membership dues, permits, stamps, etc., amount to $71 million, 3 percent of all fishing expenditures.

California's rural counties and the small communities within their boundaries have suffered during this most recent economic downturn. Preliminary state Economic Development Department data for April 2013 (not seasonally adjusted) reveals the rate of unemployment for these 17 counties to be: Alpine – 9.8%; Amador - 9.8%; Butte – 10.0%; Calaveras – 10.5%; El Dorado – 8.6%; Fresno – 13.4%; Inyo – 7.5%; Lassen – 10.8%; Madera – 12.4%; Mariposa – 9.3%; Mono – 7.3%; Nevada – 7.6%; Placer – 7.2%; Plumas – 13.6%; Sierra – 14.0%; Tulare – 13.7%; and Tuolumne – 9.5%.

The percentage of people in these 17 counties living below the poverty level (2011 American Community Service (ACS) Survey are: Alpine – 15.2%; Amador – 10.0 %; Butte – 19.8%, Calaveras – 8.3%; El Dorado – 8.4%; Fresno – 23.4%; Inyo – 11.7%; Lassen – 14.6%; Madera – 19.8%; Mariposa – 14.4%; Mono – 11.2%; Nevada – 10.3%; Placer – 7.2%; Plumas – 13.5%; Sierra – 16.6%; Tulare – 23.8%; and Tuolumne – 13.3%.

The point in sharing these statistics is simple – the USFWS should not, **given the shortcomings in the science identified elsewhere in this joint comment letter**, take action to list these species/designate critical habitat given the negative impact of doing so on these rural counties and their constituents.

We will await the publication of the economic analysis for further comment.

Additionally, it should be noted that the peer review of the listing and proposed critical habitat, in evaluation of the "definition of the essential habitat features used in the development of the primary constituent elements that we have described for each species*,"* states that "[m]ost of the examples given here of primary constituent elements (PCEs) have nothing to do with mountain yellow-legged frogs ('roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type'). This discussion would be more useful to the reader if the example PCEs were directly relevant to the species that are the focus of this document."[6] We urge the USFWS to consider this comment and revise the proposed critical habitat accordingly.

Yosemite Toad*:*

While we find the endangered species listing proposal for the yellow-legged frog to be especially flagrant in its attempt to tie grazing to the decline of the frog population, the proposal to list the Yosemite toad blatantly

[6] Knapp, Roland A. "Comments on Proposed Rules and Critical Habitat for Rana Sierrae, Rana Muscosa (in the Sierrra Nevada), and Anaxyrus Canorous." Rev. of *Proposed Proposed Rules and Critical Habitat for Rana Sierrae, Rana Muscosa (in the Sierra Nevada), and Anaxyrus Canorous*. n.d.: n. p 12. *Federal Regulations*. Federal Register, 2 June 2013. Web. 12 June 2013.

disregards the best available science, while simultaneously relying on science that has not been peer reviewed and lacks any credibility as to the method.

Role of the US Forest Service:

In addition to the poor use of science, we believe that the USFWS is failing to account for the variety of protections afforded to both the yellow-legged frog and the Yosemite toad by the US Forest Service (USFS). We believe that, given the variety of landscapes and habitats, the USFS should be able to continue to manage these species in an allotment-by-allotment manner. We would encourage the USFWS to review the USFS memo to Forest Service Supervisors sent February 22, 2013. The memo states:

> Last year, a five year study on the effects of commercial livestock grazing on the Yosemite toad was completed. Two peer-reviewed papers based on that study indicate that livestock grazing does not have the adverse impacts on Yosemite toads that were previously assumed. Therefore, continued exclusion of livestock from meadows occupied by the Yosemite toad may not be necessary for toad conservation.[7]

We believe that, despite the proposed rule's mischaracterization of Allen-Diaz et al. 2010 and Lind et al. 2011, the USFS has appropriately used the best available science to allow for flexibility in local decision making for its forest supervisors. The implications of failing to recognize the best available science are significant. Future Section 7 consultations will likely be based on the information included in the final rule. It is imperative that the information included in the rule be accurate and based on best available science, so as not to negatively impact activities without providing any benefits to the species.

The USFS has been studying and managing for the yellow-legged frog and Yosemite toad since 1998 when they were determined to be sensitive species. Since this designation, the USFS has learned how to manage projects to minimize or eliminate negative impacts to amphibian habitat. The existing management plans as created and implemented by the USFS allow for changes in management at any point deemed necessary by local managers. The existing efforts made in managing for these amphibian species is made plain in the recently adopted Sierra Nevada Forest Plan Amendment . We encourage the USFWS to review BMP 8.1- Rangeland Management Planning, and BMP 8.2-Rangeland Permit Administration. Together, these two policies guide the allotment management planning process in order to develop measures to "avoid, minimize, mitigate and/or restore adverse impacts to water and aquatic and riparian resources during rangeland management activities."[8] The policies offer suggested "appropriate techniques from the following list adapted as needed to local site conditions," which include assessing "long-term trends of rangeland sites within riparian allotments using accepted protocols (the rooted frequency protocol)," establishing "desired conditions for water quality on rangelands that consider linkages to riparian and aquatic systems," and establishing "desired conditions for riparian and aquatic systems that reflect their ecological potential, including water quality."[9]

The Sierra Nevada Forest Plan Amendment also contains "Standards and Guidelines for Riparian Conservation Areas and Critical Aquatic Refuges," which include requirements such as:

> 92. Evaluate new proposed management activities within CARs and RCAs during environmental analysis to determine consistency with the riparian conservation objectives at the project level and the AMS goals for the

---

[7] United States. Forest Service. Pacific Southwest Region. By Randy Moore. N.p.: n.p., n.d. Print. Guidance Regarding Livestock Grazing and Yosemite Toad Conservation Sent to: Forest Supervisors, Sierra and Stanislaus National Forests and Regional Directors Ecosystem Management and Ecosystem Planning February 22,2013.p 1-2.

[8] "Region 5 - Resource Management." *Best Management Practices Evaluation Program, 2003-2007*. United States Forest Service, n.d. Web.BMP 8.1-Rangeland Management Planning

[9] Ibid.,

landscape. Ensure that appropriate mitigation measures are enacted to (1) minimize the risk of activity-related sediment entering aquatic systems and (2) minimize impacts to habitat for aquatic- or riparian-dependent plant and animal species.[10]

98. Within 500 feet of known occupied sites for the California red-legged frog, Cascades frog, Yosemite toad, foothill yellow-legged frog, mountain yellow-legged frog, and northern leopard frog, design pesticide applications to avoid adverse effects to individuals and their habitats.[11]

114. As appropriate, assess and document aquatic conditions following the Regional Stream Condition Inventory protocol prior to implementing ground disturbing activities within suitable habitat for California red-legged frog, Cascades frog, Yosemite toad, foothill and mountain yellow-legged frogs, and northern leopard frog.[12]

Along with prescribed standards, the Amendment reflects that "[t]his decision adopts standards and guidelines for willow flycatcher habitat, Yosemite toad habitat, great gray owl protected activity centers, and grazing utilization standards that better reflect the wide array of site conditions encountered in the field and the management opportunities they may provide."[13]

Given the provisions and protections measures already established by the USFS, we believe that additional restrictions are unnecessary, and will potentially incorporate the misapplied and misused science included in the proposed rule

Corrections to Science:

As previously noted, our organizations disapprove of the scientific analysis and data included for the Yosemite toad, as we believe, as do those who peer reviewed the study, that Allen-Diaz et al. 2010 should be relied upon as the best available science, and not as the meretricious data set, as implied by the USFWS.

The review implies that Allen-Diaz et al. 2010 and Lind et al. 2011 are different studies/reports, which is not the case. Lind et al. (April 2011) is an addendum to the final project report (Allen-Diaz et al. December 2010) for the USFS long-term study begun in 2005. The addendum (Lind et al. 2011) was required due to delays in analysis of summer 2010 toad occupancy and density data, and provided no evidence to change any of the conclusions made in the original report (Allen-Diaz 2010). Thus, the arbitrary dismissal of conclusions contained in Allen-Diaz 210due to perceived experimental design issues, followed by the arbitrary use of Lind et al. (2011) to support the conclusion that cattle grazing is detrimental to the Yosemite toad is, at best, inconsistent and misleading.

It should also be noted that the statement that "the design of these studies did not include direct measurements of toad survival (for example, mark recapture analysis of population trends…" is incorrect. According to the researchers involved in the study, mark recapture methods were employed in the study reported by Allen-Diaz et al. (2010) and Lind et al. (2011). The co-authors are currently awaiting the outcome of this analysis to be conducted by Dr. Amy Lind.

---

[10] United States. Forest Service. Pacific Southwest Region. *Sierra Nevada Forest Plan Amendment*. By Jack Blackwell. N.p.: n.p., 2004. Print.

[11] Ibid.,
[12] Ibid.,
[13] Ibid., p 4.

Furthermore, the conclusion that Allen-Diaz et al. (2010) had experimental design and toad population sampling flaws can be refuted by referring to the peer-reviewed study plan.[14]

With regard to the concerns noted in the proposed rule, it should also be clarified that the study plan for Allen-Diaz et al. (2010) was developed and then peer-reviewed by several scientists, one an expert in amphibian research, two experts in grazing study design, and one a statistician. The peer review of the study plan and validation of the experimental design by publication of Roche et al. 2012a and 2012b should discount the concerns about study design.

In addition to dismissing and discounting several key components of Allen-Diaz et al. (2010), the proposed rule also fails to acknowledge or discuss the two peer-reviewed research papers; Roche et al. 2012a and 2012b, which have been published from the study which Allen-Diaz et al. (2010) and Lind et al. (2011) report on in their final report to USFS.[15] This is a blatant oversight in the analysis of the available science. Publication of Roche et al. (2012a and 2012b) in recognized, respected research journals nullifies many of the concerns raised above about Allen-Diaz et al. (2010) study design. The conclusions in these peer-reviewed papers cannot be regarded as inconclusive, as they represent a comprehensive review by respected members of the research community.

USFWS should also consider that Roche et al. (2012a and 2012b) reference and discuss multiple published studies which also found no significant relationship between extensive cattle/livestock grazing and destruction of amphibian habitat. These papers support the clear, strong conclusions reached by Allen-Diaz et al. (2010). This additional information (as well as Roche et al. 20012a and 2012b) should be included in this review and resulting decision.

Finally, the omission of Roche et al. 2012a is particularly disconcerting given its citation in the Proposed Critical Habitat Designation[16] , but not in the Proposed Rule to List.[17]

Merit of Science Used:

Martin (2008) is used as the only citation in the proposed rule that supports the conclusion that cattle grazing is a definitive risk to the Yosemite toad. Martin (2008) is a doctoral dissertation, and as such, is not peer-reviewed. In addition to lacking peer review, the research does not appear to have been published.

It should be noted that the preliminary data presented in Martin (2008) on grazing within Yosemite toad habitat is from a single grazing event between August 23 and 27, 1997. The grazing data was derived from a single meadow; and includes information based upon visual observation of three meadows, one of which was grazed by horses, two by cattle, and one not grazed.[18] Citing the single case study of grazing with both limited duration and extent, which was suggested to be linked to "a sudden disappearance of toads from the area" and previous observations "of toad mortality resulting directly from grazing activities in the same meadow complex,"[19] Martin concludes that "it is reasonable to deduce that cattle grazing is having a negative effect on terrestrial stage

[14] Allen-Diaz B. and S. McIlroy, K.W. Tate, L.R. Roche , A. Lind "Determining the Effects of Livestock Grazing on Yosemite Toads (Bufo canorus) and Their Habitat: An Adaptive Management Study" December 31,2011. Appendix ,p 23.

[15] Roche L.M., A.M. Latimer, D.J. Eastburn, and K.W. Tate. 2012a. Cattle Grazing and Conservation of a Meadow-Dependent Amphibian Species in the Sierra Nevada. PLoS ONE 7(4): e35734.

16 Federal Register Vol 78, No. 80 FR 24515-24574.

[17] Federal Register Vol 78, No. 80 FR 24471-24514.

[18] Martin, D.L. 2008. Decline, Movement, and Habitat Utilization of the Yosemite toad (Bufo canorus): An Endangered Anuran Endemic to the Sierra Nevada of California. Doctoral thesis. University of California, Santa Barbara, CA. p. 101- p. 104.

[19] Martin 1991b; 1997, pers. obs.

survivorship."[20] The dissertation does not, however, report results from a replicated, multi-year grazing study based on a valid study design. Martin (2008), therefore, is not a conclusive study of grazing effects. One of the main concluding declarations in the abstract states:

> The current management practice of fencing toad breeding pools in meadows may actually increase the impact of cattle grazing on B. canorus terrestrial foraging habitats, thereby having a greater impact on long term population viability, which is a classic example of well intended management practices failing to protect species due to the absence of adequate knowledge of the specialized habitat needs of amphibians.[21]

> This statement is based on personal observations and opinion and was not explicitly studied nor part of any of the experimental study designs reported.[22]

By including Martin (2008) in the proposed ruling, the USFWS severely undermines their credibility as a scientifically reliable agency. The determination that Martin (2008) is a conclusive study based on a valid study design, while Allen-Diaz et al. (2010) and Lind et al. (2011) (plus Roche et al 2012a and 2012b) are inconclusive and based on invalid designs is inconsistent, and seems arbitrary. In our opinion, this conclusion also displays a lack of understanding of the available science.

The conclusions from Allen-Diaz et al. are based on data from five years of observation on a variety of habitat and population response variables across dozens of meadows with a minimum of three replications. The concerns raised in the proposed rule with regard to the method of Allen-Diaz et al. must be reconsidered and appropriately applied to Martin (2008), as USFWS must recognize that:

> the design of these studies did not include direct measurements of toad survival (for example, mark recapture analysis of population trends), and the design was limited in numbers of years and treatment replicates. It is plausible that for longer-lived species with irregular female breeding activity over the time course of this particular study, statistical power was not sufficient to discern a treatment effect. Further, there may be a time lag between effect and discernible impacts, and significant confounding variability in known drivers such as interannual variation in climate.[23]

Suggested Science for Incorporation : Best Available Science on Grazing, Range Management, Conservation Practices, and Sensitive Species and Riparian Health

We have the same concerns with outdated information included for the Yosemite Toad, as we shared for the two Yellow-Legged Frog species. Based on the analysis upon analysis of the literature reviewed, it is clear that most, if not all of the science used throughout the report is dated and does not reflect current information. Most references are from the time period 1980 -2000. In 2011, 40 scientists published a comprehensive review of the effectiveness of grazing and range management-conservation practices to sustain and conserve riparian areas, habitat, water quality, and a suite of ecosystem functions and services.[24] In particular, this peer-reviewed literature synthesis clearly demonstrates that modern range and grazing management practices, as

---

[20] Martin, D.L. 2008. Decline, Movement, and Habitat Utilization of the Yosemite toad (Bufo canorus): An Endangered Anuran Endemic to the Sierra Nevada of California. Doctoral thesis. University of California, Santa Barbara, p. 305-p .306.

[21] Ibid.,, p. ix – p .x.

[22] Ibid., p. 306.

[23] Endangered and Threatened Wildlife and Plants: Endangered Status for the Sierra Nevada Yellow-legged Frog and the Northern Distinct Population Segment of the Mountain Yellow-legged Frog, and Threatened Status for the Yosemite Toad (Proposed Rule)." Federal Register 50 CFR 17 (April 25,2013) p24503.

[24] Briske, D. D. 2011. Conservation benefits of rangeland practices: assessment, recommendations, and knowledge gaps. Lawrence, KS: United States Department of Agriculture, Natural Resources Conservation Service. p. 429.

currently conducted on USFS grazing allotments, are compatible with riparian enhancement.[25] These current findings, based on the entirety of the published literature on this topic up to 2011, clearly demonstrate that the concerns raised about the impacts of livestock grazing to stream and meadow hydrology, etc. are more appropriately associated with grazing management practices of past decades, and do not reflect current practices.

In addition to including modern science related to range management, our organizations also request that the information provided by Knapp in his peer review of the proposed rule be included. In his review, Dr. Knapp states:

> The Proposed Rule makes are compelling case that although *A. canorus* remains widespread across its historical range it has disappeared from a significant fraction of historical localities. The Proposed Rule also uses available (but scanty) information to argue that the species has likely declined in abundance. However, given the difficulty of accurately quantifying toad abundance and the lack of studies that have provided such information, the evidence for declines in abundance remains weak. As such, we can really only conclude that *A. canorus* has disappeared from some sites, but that trends in abundance remain highly uncertain. These data would seem to provide a relatively weak foundation for listing *A. canorus* as threatened, and a "not warranted" conclusion could also be justified. The Service's argument for listing *A. canorus* as threatened is weakened considerably by the apparent failure to include all of the *A. canorus* localities in Yosemite and Kings Canyon National Parks in the analyses described in the Proposed Rule, and by the poorly-supported determination that the Yosemite toad is a valid species. These weaknesses make the alternative finding of "not warranted" for listing an alternative that is difficult to dismiss.[26]

Given the inadequacy of the science presented in the proposed rule and the omission of credible, relevant bodies of work, we strongly urge against both listing and the designation of critical habitat. Peer review comments reflect a rejection of the proposed rule and the habitat designation should be rejected as well. At this time, it is our determination that the USFWS lacks the science necessary to demonstrate a declining population, making the discussion of critical habitat designation an unnecessary exercise.

---

[25] George, M., R. D. Jackson, C. S. Boyd, and K. W. Tate. 2011. A scientific assessment of the effectiveness of riparian management practices. In: D. D. Briske (ED.). Conservation benefits of rangeland practices: Assessment, recommendations, and knowledge gaps. Lawrence, KS: Allen Press. p. 213-252.

[26] Knapp, Roland A. "Comments on Proposed Rules and Critical Habitat for Rana Sierrae, Rana Muscosa (in the Sierrra Nevada), and Anaxyrus Canorous." Rev. of *Proposed Proposed Rules and Critical Habitat for Rana Sierrae, Rana Muscosa (in the Sierra Nevada), and Anaxyrus Canorous*. n.d.: n. pag. *Federal Regulations*. Federal Register, 2 June 2013. Web. 12 June 2013.

Our organizations hope that the USFWS will meaningfully consider these comments as they relate to both the listings and proposed critical habitat. In particular, the USFWS should seriously consider the protections already being employed by the USFS. As previously stated, we believe that the science used in the proposed rule mischaracterizes real threats to both species and implores the USFWS to further review and expand its literature review to the studies cited herein in order to modernize the record with comprehensive, relevant information. We will be providing more detailed comments on the proposed critical habitat designation once the economic analysis is released.

Thank you for your consideration of these comments.

Sincerely,

California Cattlemen's Association
California Farm Bureau Federation
California Wool Growers Association
Rural County Representatives of California
Public Lands Council
National Cattlemen's Beef Association