

**Email and  
CERTIFIED MAIL**

April 16 , 2010  
Laural Ames  
California Watershed Network

Gaylon Lee, P.G.  
Division of Water Quality  
State Water Resources Control Board  
P.O. Box 2231  
Sacramento, CA 95812

Dear Mr. Lee,

Thank you for this opportunity to provide comments regarding the proposed update of the Water Quality Management Plan (WQMP) for Forest Service I (USFS) lands in California, and the Water Board's proposed development of a waiver/permit process for U.S. Forest Service (USFS) projects. I have cited numerous enclosures which have been sent by USPS to you.

These preliminary comments address the WQMP, the proposed waiver/permit, and specifically the March 12 draft proposed changes to the BMPs for Rangeland Management. These comments are from the perspectives and interests of stakeholders who engage in non-motorized recreation.

While the WQMP is the most important document and is in need of substantial revisions to actually protect water quality on and from USFS lands, the on-the-ground BMPs are the tools that are needed to do much of the water quality protection work.

We are concerned that the 3/12/10 draft proposed Rangeland Management BMPs are woefully inadequate in terms of the goal to protect the state's water quality. It is very important that we get the BMP goals clear, the science that they serve well understood and focus on BMPs that are proven to be effective, or, are being rigorously tested to assure that only the effective BMPs are used..

Key elements of the process are discussed in our comments below:

1. First, as I noted at our last stakeholder meeting, neither the draft BMPs nor the current WQMP incorporate or otherwise address the key elements of the State Water Board's *Nonpoint Source Implementation and Enforcement Policy* (May 2004). That policy was developed and adopted by the State Water Board in a formal rulemaking process, and all the relevant provisions it contains must be applied to the USFS.

The USFS has essentially ignored the state's NPS Policy ever since it was adopted. We are concerned that it does not appear to have been applied over the past five years. It is a mandatory policy and now is the time to apply it in all USFS projects, not limited to the five selected early in the stakeholder process. In fact, I do not think that the stakeholders intended or knew that the selection process would limit the WQMP to five areas of USFS activity.

2. Hundreds of scientific studies have documented in great detail the potential for significant adverse environmental consequences, including impacts to water quality, due to rangeland livestock grazing. Enclosure #1 (Allen-Diaz and others 1998) is just one of many available literature reviews that document the numerous adverse environmental impacts caused by ranching activities such as those conducted on USFS lands throughout California.
3. Scores of scientific studies have documented the basic and fundamental need to monitor instream water quality (in addition to other monitoring parameters such as habitat features) in order to adequately characterize the impacts of ranching activities, and to determine the success or failure of management actions in terms of Basin Plan objectives and water quality in particular. (see Enclosure #2; USEPA 1993).
4. Stakeholders who use and enjoy USFS lands for non-motorized recreation are very concerned about the water pollution that results from livestock grazing on USFS lands in California. We often come into direct contact with the water that has seen domestic animals as we actively recreate in such activities including, but not limited to, wading, swimming, playing, fishing or otherwise contacting or swallowing (both intentional or unintentional) surface waters. In fact, many hikers, campers, backpackers, and other recreationists rely on surface waters within USFS lands as their primary source of drinking water. Because we routinely contact and swallow the water, one key concern is pollution of water by pathogens (i.e., organisms or agents that cause mild to serious diseases).
5. I have enclosed copies of articles that are very clear that rangeland livestock often result in contamination of the surface waters with indicator bacteria and other pathogens. In the Lake Tahoe basin, Big Meadows showed a significant drop in pathogens one year after cattle were removed from the allotment. ( Enclosure #1 ((at pp. 41-45)) and Enclosure #2 ((at p. 81-85))

Faced with the results of these scientific reports, it is clear that water quality must be rigorously addressed in livestock grazing BMPs

6. It is important to remember that Water Boards and others in California have documented that livestock ranching activities on USFS lands often violate state water quality standards for pathogens, even when the USFS's BMPs are applied. (See, as one example, Enclosure #3, Notice of Violation, 8/25/99.)

7. Further evidence is found in reports by scientists from the University of California who have documented significant and widespread pollution of surface waters due to livestock grazing on USFS lands in California. (See Enclosures #4 and #5.)
8. Even more critically for water quality protection, after the University of California (Enclosure #4) was published, the USFS promised that: ***“This is something we are definitely going to follow up on”*** (Enclosure #5). To the utter dismay and disgust of the stakeholders, since that time, the USFS has done nothing to address water pollution caused by livestock grazing on NFS lands in California. In fact, outrageously, the USFS has claimed that recreationists should treat all water before drinking it! In brief, the USFS argues that it is okay for livestock to pollute surface waters with pathogens because the agency believes that users of the water should treat the water before drinking.

Shifting responsibility to the people using the public lands makes a mockery of the Clean Water Act and state water quality laws. Nowhere do these laws allow water to be knowingly polluted based on the assumption that users can or should treat the water before using it. In fact, the laws require the water to be clean before delivering it to the people. The USFS position also ignores the unintended swallow that can occur when swimming, playing, or otherwise recreating in and near surface waters that have been polluted by livestock wastes. It is impossible to treat water before inadvertently swallowing it during such recreational activities.

There are no BMPs that can protect a swimmer once the pathogens enter the water. The BMPs must protect the water from the pathogens. The USFS has the obligation to all users to prohibit pollutants from being discharged to waters in the National Forests.

9. The above statements and enclosures are not new information to the USFS. National forests in California have repeatedly acknowledged that cattle are polluting surface waters. For example, one recent USFS Environmental Assessment states: ***“cattle have been documented to contribute to fecal coliform, giardia, etc., in streams...These contaminants can move off-site, or downstream, and persist in the water environment. Cattle authorized to graze in the project allotments are likely to continue to be part of the cumulative effect of introduction and continuation of these contaminants in waters in and downstream of the allotments.”*** (See, for example, (EA, 2006, Stanislaus NF) (Enclosure #6, at p. 84.)

Again, the USFS responds to such contamination simply by saying that users should treat water before drinking.

10. Recreation users have repeatedly questioned and objected to the USFS’s position that it is somehow okay to pollute water simply because USFS thinks that users should treat all surface waters before drinking (Enclosure #7.) Recreationists have suggested that the USFS must manage livestock to prevent the controllable discharge of wastes to surface waters. The USFS has to date ignored such comments.

No proposed BMPs respond to this water quality issue.

11. Recently (2008), more scientific reports have verified the findings of these earlier studies, making clearer than ever that pollution of surface waters due to livestock grazing is significant and widespread on NFS lands in California. (See Enclosure #8.)
12. In addition to direct water-contact recreation, non-motorized recreationists also engage in non-contact recreation (i.e., recreation at the water's edge), including but not limited to activities such as picnicking, sunbathing, hiking, and aesthetic enjoyment. These stakeholders are adversely and significantly affected, for example, by surface waters and wetlands that have been trampled and muddied by livestock, and by the foul odors and algae growths resulting from livestock manure that is dropped into and near surface waters, including wetlands.

The draft BMPs fail to address in any meaningful way the ongoing significant adverse impacts to non-contact water recreation that is caused by livestock grazing on USFS lands throughout California.

13. To further underline the lack of relevance between the proposed BMPs to the actual condition experienced by stakeholders, the USFS, instead of monitoring water for pathogens or pathogen indicators (i.e., fecal coliform, *E. coli*, etc.), the agency currently relies on visual observations of landscape features as cheap surrogate indicators of water quality. These visual monitoring methods (i.e., BMPEP, PFC, etc.) have no demonstrated linkage to state water quality standards.

The 3/12/10 proposed Rangeland BMPs would continue the USFS's misplaced reliance on inexpensive, unproven, qualitative visual observations in lieu of actual water testing. This is both outrageous and unacceptable to stakeholders using the public lands.

14. The proposal to add Properly Functioning Condition (PFC) monitoring to the Rangeland BMPs may be a small step in the right direction, but it cannot substitute for actual water monitoring for pathogen indicators (i.e., fecal coliform, *E. coli*, etc.).
15. The PFC method, as we all know, relies on qualitative visual observations (Enclosure #9). It was not designed or ever intended to replace quantitative monitoring such as water testing to evaluate compliance with state water quality standards (Enclosure #10).

Quantitative water quality monitoring is the only known way to assure that the state's water quality standards have been attained and protected.

### Conclusion

Given the above well-documented facts and discussion, the non-motorized stakeholders who recreate on USFS lands, respectfully request that the State Water Board:

- 1) acknowledge the significant and widespread pollution of surface waters that results from livestock grazing on NFS lands in California;
- 2) acknowledge the significant and widespread adverse impacts to beneficial uses of water for both contact recreation and non-contact recreation that results from livestock grazing on NFS lands in California;
- 3) require that site-specific BMPs be specified and made available for review and comment by the public and the Regional Water Boards for all livestock grazing projects/permits;
- 4) allow the Regional Water Boards to preclude and remove any USFS grazing project from coverage under the proposed statewide waiver/permit if Regional Board staff finds that a project may affect water quality;
- 5) require robust and routine water sampling & analyses for pathogens by the USFS wherever livestock are allowed to come into direct contact with surface waters designated for recreation beneficial uses as described in the Basin Plans, including wetlands; and
- 6) require immediate and mandatory corrective action whenever bacterial contamination is found.

Thank you, again, for this opportunity to provide preliminary comments. Please contact me if you have any questions, or desire any clarification of the issues discussed in this letter. Again, please note that the lengthy enclosures cited have been sent under separate cover to Gaylon Lee at the State Water Resources Control Board.

Very truly yours,

Laurel W. Ames  
California Watershed Network  
(representing non-motorized recreation interests)

***Enclosures (1-10):***

Enclosure #1: Allen-Diaz, B., R. Barrett, W. Frost, L. Huntsinger, and K. Tate. 1998. *Sierra Nevada Ecosystems in the Presence of Livestock: A report to the Pacific Southwest Station and Region, USDA Forest Service*. Rangeland Science Team, October 1, 1998. 114 pp.

Enclosure #2: U.S. Environmental Protection Agency. 1993. *Monitoring Protocols to Evaluate Water Quality Effects of Grazing Management on Western Rangeland Streams*. USEPA Region 10 Water Division, Surface Water Branch. EPA 910/R-93-017. October 1993. 179 pp, plus appendices.

Enclosure #3: *Notice of Violation – Discharges of Wastes in Excess of Lahontan Basin Plan Water Quality Objectives for Fecal Coliform on USFS/LTBMU Grazing Allotments*. Violation letter from Lahontan Water Board's Executive Officer to Ed Gee, Forest Supervisor, plus attachments. August 25, 1999.

Enclosure #4: Derlet, R.W., and J.R. Carlson. 2006. Coliform Bacteria in Sierra Nevada Wilderness Lakes and Streams: What Is the Impact of Backpackers, Pack Animals, and Cattle? *Wilderness and Environmental Medicine* 17:15-20.

Enclosure #5: Rogers, P. 2006. Risk lurks in Sierra waters: Study shows unsafe *E. coli* levels from cattle & horses. *The Mercury News*, April 26, 2006.

Enclosure #6: *Environmental Assessment – Rangeland Allotments Phase 1*, Stanislaus National Forest, December 2006, 140 pp., plus maps. (See esp. pp. 22, 74, 76-84.)

Enclosure #7: Sierra Forest Legacy et al. 2007. *Notice of Appeal of the Decision and FONSI for the RANGELAND ALLOTMENTS PHASE 1 (Decision #16046)*, 80 pp. (See esp. pp. 14-22.)

Enclosure #8: Derlet, R.W., K.A. Ger, J.R. Richards, and J.R. Carlson. 2008. Risk Factors for Coliform Bacteria in Backcountry Lakes and Streams in the Sierra Nevada Mountains: A 5-Year Study. *Wilderness and Environmental Medicine* 19:82-90.

Enclosure #9: *Using Proper Functioning Condition Riparian Assessment Protocols in Forest Plan Implementation*, memo from Regional Forester to Forest Supervisors, October 16, 1997. 3 pp.

Enclosure #10: Fact Sheet: *PFC (Proper Functioning Condition): What it Is – What it Isn't*. National Riparian Service Team, July 17, 1997, 2 pp.