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Richard Booth
Chief, TMDL/Basin Planning Unit
Lagontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd
South Lake Tahoe, California 96150

RECEIVED
SEP 28 2012
By RWB

Dear Mr. Booth:

The USDA Forest Service, Pacific Southwest Region (USFS), offers the following comments on the Triennial Review of the Lahontan Basin Plan specific to the topic "Revise water quality objectives for bacteria".

1. The current basin plan objective for fecal coliform (FC) is a log mean of 20 colony forming units per 100 milliliters (cfu/100 mL) and is applied to all surface waters within the Lahontan Region because all surface waters have the contact recreation (REC-1) beneficial use designation.

2. The current basin plan objective does not allow any concentrations of coliform bacteria from humans or livestock.

3. Both U.S. Environmental Protection Agency (USEPA) regulations and the State's Porter-Cologne Act require that basin plan objectives be scientifically defensible and based on the protection of identified beneficial uses.

4. The current basin plan objective has no scientific basis linking the objective to protection of the identified REC-1 beneficial use, and is therefore not in compliance with applicable federal regulations and State law. The most recent (1976) USEPA standard for FC for recreational waters was 200 cfu/100 mL. This standard is used currently by the Central Valley Regional Board, which adjoins the Lahontan Region to the west. In 1986, the USEPA shifted to a standard based on E. Coli, and the 2012 draft USEPA water-quality standards uses this same E. Coli standard of a geometric mean of 126 cfu/100mL and a 75th percentile of 235 cfu/100 mL. The USEPA standard was based on extensive scientific studies to establish links between ambient bacterial concentrations and impacts to human health. No such studies have demonstrated a need for a basin plan objective of 20 cfu/100 mL, which is ten times lower than the most recent USEPA FC standard.

5. The Lahontan Board acknowledged in Resolution No. R6T-2007-0019 that a FC standard of 200 cfu/100 mL was protective of beneficial uses, which include REC-1.

6. The current basin plan objective is not consistently achieved even in the absence of livestock. Data provided by Lahontan Board staff (Smith, D.F., Lahontan Regional Water

Quality Control Board, written communication, March 16, 2012) indicate that FC concentrations exceeded the basin plan objective on numerous occasions on streams on the Inyo National Forest when cattle were not present. A study recently completed by the USFS and UC Davis found that of 743 samples collected across 12 USFS grazing allotments, 50 percent exceeded the 20 cfu/100 mL standard. For 125 samples collected at sites identified as recreational sites without key grazing areas, 46 percent exceeded the 20 cfu/100 mL standard. In contrast, only 10 percent of all samples and 6 percent of samples from recreational sites without key grazing areas exceeded the 200 cfu/100 mL standard advocated by the USEPA.

7. The current basin plan objective, in requiring bacterial concentrations that are too low to be generally achievable and ten times lower than needed to protect identified beneficial uses, and in completely prohibiting coliforms from humans or livestock, does not allow reasonable use of public lands consistent with the Multiple Use Sustained Yield Act.

8. Your staff proposes three options for revising the current basin plan objective, all of which would require at least three years of staff work. We suggest that you immediately shift either to the former USEPA standard of 200 cfu/100 mL, consistent with the neighboring Central Valley Region, or to the proposed USEPA standard for E. Coli. Such a change is supported by credible scientific information, would protect designated beneficial uses, and would require no investment of staff resources.

9. We recommend that a 10 percent subset of any samples collected for the purpose of assessing the basin plan objective for bacteria be analyzed for identification and quantification of pathogens in order to link revised objectives to risks to human health.

Thank you for the opportunity to comment on the Triennial Review of the Basin Plan. If you have any questions, please contact Barry Hill, Regional Hydrologist, at (707) 562-5968.

Barnie T. Grant
for RANDY MOORE
Regional Forester

cc: Barry Hill