



## Quartz Valley Indian Reservation

13601 Quartz Valley Road

Fort Jones, CA 96032

ph: 530-468-5907 fax: 530-468-5908

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Date: July 6, 2010

To: Barry Hill, USFS Regional Hydrologist & Gaylon Lee, SWRCB

From: Quartz Valley Indian Reservation

**Re: Review comments regarding the NCRWQCB -USFS Region 5 Draft Waiver Best Management Practices 2-1, 2-2, 2-4, 2-7, 2-14, 2-21, 2-22, and 2-24**

### **Preface**

This short note discusses a few of our overall observations regarding the BMPs we reviewed. I have attached the reviewed versions of the above listed draft BMPs and, as requested, our detailed comments and edits are contained within each BMP document in Word Tracking. This should be viewed as a preliminary review of eight BMPs without context to other BMPs or a statement of purpose and procedure that will undoubtedly accompany the entire BMP manual. As such, our comments are limited to the individually listed BMPs.

Partially because of their lack of context within the entire manual of BMP procedures and techniques, we found these pre-draft BMPs to be generally inadequate and poorly described. Granted, these pre-draft BMPs have been taken out of context by not being associated with the complete document and the remaining BMPs, but many of the individual Practices we reviewed were not very well written or technically adequate as best practices. There was no discussion as to why they were considered best practices or what distinguished them from standard practices used in other areas of the National Forest system, or as compared to State Water Board required practices that are currently being followed by industrial timber land managers in Region 5. It is our observation that industrial timberland owners own lands in many of these same or nearby watersheds and are required to spell out in far greater detail how the “standard” will be implemented, how it will be evaluated in terms of water quality protection, what is done when there is a discharge violation, etc. Finally, each of the eight USFS “Practices” (interpreted to mean “Best Management Practices”) we reviewed has a list of references at the bottom, but the nature and purpose of these references is not described.

We did some research and found the BMP manual from which these Road and Building Site Construction Best Management Practice BMPs were originally derived (USDA, 2000)<sup>1</sup>. I have attached it for your review. It contains the same topics and BMP format so it’s clear that it is the origin of these eight short BMP documents. It provides the context and the actual current (as of 2000) USFS water quality BMPs that have been slightly re-written into their present pre-draft form (that we reviewed) for the Waiver process. It is helpful to see the original version and the attempt the Forest Service made to

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<sup>1</sup> USDA. 2000. Water Quality Management for Forest System Lands in California, Best Management Practices. Pacific Southwest Region. September 2000: 138 pages.

modify the Practices for the purposes of the Water Quality Waiver program. It is not clear, nor is it described in the documents we reviewed, how the proposed changes to the BMPs published in 2000 (USDA, 2000) actually serve to increase water quality protection to the level required by the State of California. We found a number of the proposed changes to have actually reduced the clarity and specificity of the proposed BMPs without obviously increasing their ability to protect water quality

## **Introduction**

To evaluate the adequacy of the proposed BMPs it is important to review the standards a good BMP must meet. For reference, a water quality Best Management Practice, or BMP, is defined by the EPA in 40 CFR Part 130 (Water Quality Planning and Management) as follows:

**§ 130.3 (m) *Best Management Practice (BMP)*.** Methods, measures or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

**§ 130.6 (4) *Nonpoint source management and control*.**

(i) The plan shall describe the regulatory and non-regulatory programs, activities and Best Management Practices (BMPs) which the agency has selected as the means to control nonpoint source pollution where necessary to protect or achieve approved water uses. Economic, institutional, and technical factors shall be considered in a continuing process of identifying control needs and evaluating and modifying the BMPs as necessary to achieve water quality goals.

In *Water Quality Management for Forest System Lands in California* (USDA, 2000) the Forest Service defines a Best Management Practice as: “A practice, or combination of practices, that is determined by the State (or designated area-wide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practical (including technological, economic, and institutional considerations) means of preventing, or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.” The “practices” that are referred to here can include a number of types of control mechanisms (e.g., structural, non-structural, planning, procedural, operational, educational, etc) that, taken together, serve to meet California’s NPS water quality goals and Basin Plan requirements.

BMPs are technology and education based requirements in the federal stormwater regulations that call for the implementation of controls to reduce the discharge of pollutants to the maximum extent practicable. BMP refers to operational activities, physical controls or educational measures that are applied to reduce the discharge of pollutants and minimize potential impacts upon receiving waters, and accordingly, refers to both structural and nonstructural practices that have direct impacts on the release, transport, or discharge of pollutants.

In theory, the goal of BMP practices is to maintain the pre-development discharge characteristics as close as possible, even after development of a site, and/or to reduce the impacts to beneficial uses of the water to an accepted level. It must be understood in this context that BMPs do not merely act as

controls for new development, but these practices equally apply to existing developments (i.e., roads) as well as areas that have undergone any kind of re-development.

The BMP concept has the following key elements (D'Arcy and Frost, 2001)<sup>2</sup>:

- There is a need for guidance that offers practical prevention options.
- The options need to be defined and explicit best practice rather than ill-defined individual interpretations of what is required.
- The options should be describable as best practice, based on research and experience.

### **Discussion**

After we completed our review of the individual pre-draft BMPs, we discovered the *Road Building and Building Site Construction Practices* chapter in the Forest Service BMP manual (Section 12.22, USDA, 2000) currently contains 28 individual Practices. Reviewing only 8 of the 28 practices in isolation did not allow us to see their context in relation to all the other practices. It would have been useful to at least have seen the outline of all the water quality protection practices that would eventually be addressed so the adequacy and completeness of the measures we reviewed could be established. For example, in reviewing the Road Location and Design BMP it was not possible to know if there was a parallel BMP for road decommissioning. Because this BMP only talked about road construction and peripherally about road relocation, we assumed road construction, road reconstruction, road upgrading and road decommissioning would all be covered in the same BMP. That may not be the case. It will be much easier to provide a thorough technical review of the proposed water quality BMPs when the entire list is available for analysis. Only in that manner will it be possible to determine if elements are missing or inadequately addressed.

The eight (8) “Practices” listed in the documents we reviewed have no associated standards and to our minds do not qualify as BMPs, if that was their intended purpose. They contain some general guidance but are not sufficiently well defined and explicit to serve as standards meeting California NPS water quality BMPs. Some “practices” we found to be so generalized and generic that they barely serve as “intent language” and are not sufficiently detailed to provide guidance or to serve as procedural BMPs. They describe in incomplete and very general terms how the Forest Service has done things since 2000 and how they intend to modify their activities starting in 2010, but not what would be determined to be a Best Management Practice for each procedure or activity. As defined above, the practices “should be describable as best practice, based on research and experience.” There is nothing in the text that describes why these measures and procedures should qualify as Best Management Practices to protect water quality.

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<sup>2</sup> D'Arcy, B. and A. Frost. 2001. The role of best management practices in alleviating water quality problems associated with diffuse pollution. *The Science of the Total Environment* 265: 359-367.

Generally, the Practices contained in these eight short documents each contain the following elements: 1) Objective, 2) Explanation and 3) Implementation. In general, for most of these we found no explicit standards or well defined technical descriptions of what it is, where and when it is to be performed, and how it is to be done. More detail is needed. In our minds a standard would be required for a procedure to be considered a BMP and it would provide guidance on the minimum specifications and performance criteria. For example, the first Practice is called General Guidelines for the Location and Design of Roads (Practice 2-1). The original description of Practice 2-1 (USDA, 2000) is actually more detailed and descriptive than the updated version we were asked to review. In our view, neither is sufficiently detailed or specific to qualify as a BMP for water quality protection measures associated with the Location and Design of Roads on forest lands. This BMP, as with the seven others we reviewed, lacks detail and specificity and needs a lot of additional work.

### **Conclusion**

We have provided some editing and a lot of comments on the eight Practices (BMPs) we were asked to review. Our comments were developed before we found the BMP manual from which they were derived (USDA, 2000), but that would not have changed our opinion on their utility, sufficiency or adequacy. It simply would have provided a useful context so we didn't have to wonder what else was missing or what was to be covered by another BMP.

In general, we did not find the eight draft BMPs to be adequate. The BMPs were general and non-specific. They did not contain sufficient guidance and were not technically or procedurally explicit or well defined. There was no indication as to why they were considered "best" practices, either by research or experience, as compared to the current Forrest Service BMPs for the same activities. These eight BMPs are strictly interpreted as planning or procedural BMPs. There were no technical standards or specifications for the specific structural and non-structural BMPs that were listed within each of the eight "practices" we reviewed (e.g., settling ponds, debris racks, energy dissipation, etc). In addition, if the suite of structural and non-structural BMPs that were listed with in these eight practices has been technically described elsewhere, they were not clearly referenced within these measures and they were not available for review.

Sincerely,

Crystal Bowman, Environmental Director  
Quartz Valley Indian Reservation Environmental Protection Program