May 7, 2010

Gaylon and Mike,

I used track changes to make my comments to the draft AMP document. My comments are in pink below. Primarily, it is not clear where the transparency, accountability and consequences are. The goal should be 100% compliance with both the BMPs and water quality objectives.

Thanks,
Karen Schambach
California Field Director
Public Employees for Environmental Responsibility

State WQMP Adaptive Management System – DRAFT
4/22/2010

2. Responsibilities

Agency Executives: Approve and sign State WQMP, which will include this AMS. Provide internal resources to support agencies' roles and responsibilities under the WQMP and management system. Direct actions and decisions based on recommendations provided in monitoring reports produced by staff and/or by the Joint USFS/Waterboard Science/Policy Team.

USFS Regional Office Staff: Coordinate ongoing communication between USFS and Waterboard staff at Regional level. Coordinate synthesis of monitoring information collected and reported at the Forest level, to develop regional reporting of monitoring and research results. Coordinate annual reporting of region wide results, along with an annual training and workshop on monitoring techniques and results. Coordinate periodic (4 year intervals) comprehensive review of monitoring research results to inform and recommend modifications to either technical guidance documents (ie. BMP manuals) , or the AMS monitoring and research program.

USFS Forest Staff: Implement Forest level monitoring as described in Section V. Use monitoring data collected during project to immediately inform and adapt project

implementation to correct deficiencies and prevent harm to soil and water resources and beneficial uses. Report monitoring data and how project implementation is to be adapted to local regional waterboard staff and regional USFS staff as described in Section VI. Use annual reporting to share lessons learned, and recommend to line officers modifications to design features/BMPs, and administrative processes at the Forest level to improve planning, contracting, and implementation of Forest management activities. Should there be some immediate project level reporting, rather than just annual reporting. Institutional memories are short; people transfer or retire. How can we capture lessons faithfully?

Water board Staff: Provide immediate feedback to USFS Forest Staff regarding Water board's independent monitoring inspections. Periodically attend BMPEP inspections and/or training to increase calibration among agencies.(What does this mean?) Review annual reports and provide feedback to USFS regarding report adequacy and implications. Meet annually (with whom?) to potentially revise structural and analytical elements of the adaptive management system.

Stakeholders : (Who are the Stakeholders?)This process will be open to the stakeholder community who will review and comment on all aspects of the AMS program, including the monitoring strategies, monitoring reports, and management recommendations. Stakeholders many provide endorsement of State WQMP and AMS if they support the approach.

3. Procedures & Requirements

Under Act: why would one adjust goals? If the goal is clean water, that shouldn't change; just actions to get us there. Is there a danger Adaptive management can become a political tool to adjust goals when existing actions (BMPs) fail to do the job, rather than adjusting actions when they fail to meet the goals?

II. Roles and Responsibilities

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Stakeholders will provide review and perspective/input to design of AMS, monitoring strategies, monitoring reports, and management recommendations. Stakeholders should also have a role in project level monitoring, to inform their programmatic stakeholder roles.

III. *PLAN* - Goals and Objectives of State WQMP

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11. To enhance Forest Service performance as a water quality management agency, and increase and improve its responsibility, transparency and accountability in its relationships with the Water Boards and the public.

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IV. *PLAN* – Conceptual Model and Key Monitoring Questions

The conceptual model in Figure IV.A describes the information needed to determine whether we are achieving the goals and objectives described in Section III.

From this conceptual model, the following describes the key questions for evaluation by the monitoring program, that will provide the information needed to determine whether we are meeting the general objectives described in Section III.

BMP Implementation and effectiveness (Objectives 6,7,8):

1) Is the Regional BMP Handbook being effectively and consistently utilized to assure BMPs are being designed appropriately in USFS planning and contracting processes at the Forest scale? What improvement can be made to increase utility of guidance provided in BMP handbook?

2) Are BMPs to protect soil, water, and aquatic resources described in NEPA/CEQA analysis and decision being implemented as designed, and what are causes of implementation deficiencies.

Methods
Project Scale: BMP Implementation checklists
Forest and Region Programmatic Scale: BMPEP

(target: 95% success across forest or region) Why wouldn't the target be 100% effectiveness?

3) Are BMPs to protect soil, water, and aquatic resources implemented as part of USFS management practices effective at preventing adverse impacts to these resources, and what are the causes of effectiveness deficiencies?

Methods
Project Scale: Daily diaries kept by project managers during storm events. (No, monitoring should be done by independent hydrological staff!) Temporary BMP Monitoring-(LTBMU only).
Forest/Region Programmatic Scale: BMPEP

Quantitative BMP effectiveness studies and research would also be utilized as it becomes available.

(target: 95% success across forest or region). Target: 100% effectiveness. (If one were shooting an arrow at a target, one would go for a bullseye, not the first ring outside. You might not get it, but you get closer than if you aim outside the bullseye.

Effectiveness and Validation Monitoring at the Watershed Scale (Objectives 1,2,3)

4) Are BMPs effective in meeting water quality objectives at the watershed scale? Are implementation and/or effectiveness performance targets sufficient to meet water quality objectives? Are performance targets consistent with the protection, maintenance, and restoration of beneficial uses? These activities include the application of best management practices (BMPs) as described in the Regional BMP Handbook, as well as the restoration of legacy sites..

Methods

Forest/Region programmatic: Focused watershed monitoring utilizing USFS Stream Channel Condition Inventories. This won't catch pollutants such as ecoli.

(Targets: ?% of streams within reference conditions (SCI), ?# of streams delisted every 5 years, no increase in listed streams as a result of mgt activities)

A description of the methods utilized to evaluate attainment of specific monitoring objectives and targets is presented in Section VI below.

V. *DO* – Implement the BMPs and Water Quality Management Program

This work will involve implementing the BMPs and other prescribed water quality protection practices during all project planning and implementation activities, including the restoration of legacy sites. Methods used will be the current practices and procedures as prescribed in prevailing BMPs, Forest Plan Standards and Guidelines, and other relevant documents. Why start with the current practices, if we know they are not effective?

VI. *Check* – Implementation, Effectiveness, and Validation Monitoring Strategy

A comprehensive and regionally consistent water-quality monitoring program is needed to guide water-quality protection programs on national forests in the Pacific Southwest Region. The program described below is intended to meet the needs of the Region as well as the State Water Resources Control Board and the Regional Water Quality Control Boards for water-quality information. The program described below includes procedures for evaluating if the practices for protecting water quality were implemented as prescribed (implementation (or compliance) monitoring. The program also assesses whether current practices are effective and whether the performance targets are adequate for accomplishing the intended water quality goal.

Criteria

The program is designed to include the following:

1. A scientifically valid approach to data collection and analysis.
2. Early detection of water-quality problems associated with current management activities.

3. Follow-up monitoring to ensure correction of known deficiencies and to evaluate long-term effectiveness of water-quality protection measures.
4. Conjunctive hillslope and in-channel monitoring ("nested" monitoring) to evaluate linkages between BMP effectiveness and effects on beneficial uses.
5. Evaluation of trends in beneficial uses in receiving waters downstream of forest management activities, including waters listed as impaired under section 303(d).
6. Assessments of water quality in relatively pristine reference streams for comparison with listed and potentially listed impaired waters.
7. Targeted monitoring of high-risk projects.
8. Flexibility in program scope to ensure that the program can be accomplished with available Forest Service resources. What does this mean? Every project with the potential for impacting water quality should have monitoring included in the project, including budgeting for monitoring.

Program Management

1. The monitoring program is a regional program coordinated by the Regional Office and conducted by the national forest staffs.
2. Monitoring targets are made based on regional priorities, rather than being evenly distributed among forests. As above, all projects should include monitoring in their budgets. If a forest can't afford to monitor, then it shouldn't do the project.
3. Annual targets for all monitoring activities are set by the Regional Office and communicated to the State and Regional Boards. Targets are changed as necessary to reflect changes in funding and staffing.
4. Funding to support monitoring is allocated based on assigned targets.
5. National Forest watershed staff is used to conduct monitoring to the extent possible, but monitoring may also be conducted by other trained USFS personnel. Trained in what? And they must be staff not associated otherwise with the project.
6. Each national forest will submit an annual monitoring report to the State and the appropriate Regional Boards. The USFS Regional Office will submit an annual summary of monitoring results for all forests in the Pacific Southwest Region, and will compile a more detailed analysis of monitoring results every 4 years.

Monitoring Plan

This plan relies on existing well-documented monitoring methods. Hillslope monitoring for management activities use Best Management Practice Evaluation Program (BMPEP, U.S. Forest Service, Pacific Southwest Region, 2002) protocols. In-channel monitoring follows Stream Condition Inventory (SCI, U.S. Forest Service, Pacific Southwest Region, 2005) protocols.

1. Hillslope monitoring of current management activities and corrective actions

a. All projects will have administrative implementation monitoring using a "checklist" approach. This monitoring will be conducted by USFS project staff (timber, range, recreation, etc.)NO, NO , NO! We already have identified this as a problem. and will be coordinated and reviewed by the Forest Hydrologists. What will the hydrologist review, the form filled out by the project staff? What will they do; check spelling?

Administrative implementation monitoring is the primary systematic means for early detection of potential water-quality problems, and will be completed early enough to allow corrective actions to be taken, if needed, prior to the onset of the first winter after project implementation.

b. The BMPEP, with random site selection, will continue to be the primary means of assessing the effectiveness of water-quality protection for current projects on NFS lands at the hillslope scale.
c. Effectiveness monitoring for BMPEP protocols that have consistently scored 95% or higher for 5 consecutive years at the Regional (Is that Regional Water Board, or Regional Forester ?) level will be reduced to allow efforts to focus on implementation, retrospective, and beneficial-use monitoring.
d. Corrective actions will be taken in response to recommendations made the previous year to address water-quality protection, and these actions will be documented in annual BMPEP reports.
e. Follow-up monitoring for sites that were not rated as fully implemented or effective the previous year will be conducted, and results will be presented in annual BMPEP reports.
f. Selected "high risk" projects in watersheds that are at or above thresholds of concern for cumulative watershed effects, as determined by the Equivalent Roaded Area model, or in watersheds with 303(d) listed impaired waters, will have non-random BMPEP effectiveness monitoring.
g. National forests will conduct road patrols to the extent allowed by weather, safety, and road conditions during and after major storms to detect and correct road drainage problems that could affect water quality.

2. Retrospective hillslope monitoring of past management activities

a. Sample pools will be developed for timber, engineering, and grazing projects completed in the past 5 years that were rated as effective as part of the random BMPEP monitoring.
b. Projects will be selected randomly for retrospective BMPEP effectiveness evaluations.
c. Results of retrospective monitoring will be compared to original BMPEP effectiveness scores to determine if BMPs remained effective over a period of years.

3. Representative in-channel beneficial-use monitoring

The purpose of in-channel monitoring of beneficial uses is to determine whether BMPs collectively are effective in protecting water quality at the watershed scale. Effectiveness will be assessed by monitoring trends in channel characteristics that affect beneficial uses and by comparing channel characteristics of streams downstream of intensively managed areas with those in relatively pristine reference watersheds (the paired watershed approach). The State Board SWAMP program criteria will be used to determine which streams will be considered reference streams.

Because USFS resources are limited, monitoring will be restricted to a relatively small number of sites. (again, monitoring should be part of the project and budget) Therefore, monitoring sites will need to be carefully selected to represent large landscapes within the national forest system. Detecting downstream channel changes related to upstream activities is problematic (MacDonald and Coe, 2006), so monitoring sites will be located on

headwaters streams. Paired monitoring sites (intensively managed and reference) will be selected to have similar valley segment and stream reach characteristics (Bisson and others, 2006).

ACT - Short Term Corrective Actions, Reporting, and Recommendations/Decisions for Programmatic Change

Adaptive management as used in this plan means adjusting preventive and restorative methods to improve water-quality protection based on monitoring results. The general approach is to:

1. Identify problems through systematic monitoring (see Monitoring section above);
2. Identify appropriate corrective actions;
3. Verify implementation of corrective actions;
4. Document implementation of corrective actions;
5. Report discrepancies and corrective actions in annual reports to State and Regional Boards.

Response procedures for monitoring program components

1. Annual BMP implementation checklist discrepancies What does this mean; what are "discrepancies."

Draft reports will be made available to stakeholders to review, to also provide comment and input in preparation of the final report, for the both the annual and 4yr Report. Reports should be posted online for all the public to comment on.

The finalized annual report as well as the 4yr report will then be submitted to the executive staff for both the USFS and the SWRCB for the consideration of management decisions as described in Section VII below.

Field Reviews

Annually complete a field review to visit and discuss implementation and effectiveness monitoring results. Forest Service and water board staffs should organize this event and locations should change each year. Stakeholders should be invited and may be asked to help select the sites for field visits Results of BMPEP evaluations should be discussed at these events Areas of non-compliance or ineffective BMPs should be included on the field visits.
The goal for this work will be review and discuss the program in the field.