

MINUTES OF MEETING

CALFED Water Quality Technical Group

August 6, 1997

9:30 - 3:30PM

Energy Commission Building, Hearing Room A

Water Quality Technical Group: Harry Rectenwald, Tom Zuckerman, Jeanette Thomas, Bob Berger, Mark Stephenson, Tom Morgan, Elaine Archibald, Bruce Macler, Russ Grimes, Inge Werner, Jerry Boles, Pat Braziel, William R. Johnston, Bob Seyfried, Jerry Troyan, Perri Standish-Lee, Ted Roefs, G. Fred Lee, Judy Heath, Neil Dubrovsky, Parviz Nader, David Crane, Richard Denton, J.P. Cativiela, Mary Meays, John Davis, Jean Elder, John Gaston, Douglas Morrison, Kevin Donhoff, Bob Hultquist, Wayne Verrill, John Sanders, K.T. Shum, Bill Alsop, Jim Beck, Lynda Smith, Rudy Schnagl, Leo Winternitz, Larry Joyce, Rich Breuer, Phil Wendt, Robin Kirtz, Kati Buehler, John Coburn, Bill Crooks, Josh Knox, Nigel Quinn, Les Grober, Roy Wolfe, Larry McCollum, Gail Louis, Linda Mercurio, Val Connor, Stephen Murrill, David Forkel, Raymond Tom, Cat Kuhlman, Bill Jennings, Hari Rajbhandari

CALFED Team: Rick Woodard, Carol Howe, Sarah Holmgren, Dale Flowers

Meeting Format

Rick Woodard began the meeting by explaining the purpose of the meeting and reviewing the agenda. The meeting was divided into three parts. The first part of the meeting was designed to brief the group on the status of the Category III Early Implementation Funding and the recent changes to the California Toxics Rule. The second part of the meeting was designed to provide an overview of water quality issues in the Delta and San Joaquin and to review the status of the Water Quality Component Report. The third part of the meeting was designed to review the status of the overall EIR/EIS, the Water Quality Implementation Plan, and Comprehensive Monitoring, Assessment and Research Program. Following is a detailed description of the major points of each part of the meeting.

Category III Early Implementation Funding Status -- Jeff Phipps (CALFED)

Jeff Phipps described the types of proposals that have been submitted for Category III funding and the process for reviewing these proposals. Available Category III funds for this year total approximately \$70 million. A total of 385 proposals were submitted, totaling \$629,349,000. Fifty (8%) of these proposals were "water quality" proposals, totaling \$61,361,000 (9.7%). Jeff also described the two-step review process for proposals. In the first step 10-15 technical review panels will evaluate the objectives of each proposal in relation to the objectives of Category III and the Ecosystem Restoration Program Plan (ERPP). In the second step an integration panel will identify the appropriate balance of proposals. By mid October, the integration panel will characterize a pool of proposals and present it to the Ecosystem Restoration Round table for review.

The Ecosystem Restoration Round table will provide its input and then the pool of proposals will be reviewed by the CALFED policy group.

California Toxics Rule -- Catherine Kuhlman (USEPA)

Catherine Kuhlman described the proposed updates to the California Toxics Rule which were published in the Federal Register on August 5, 1997. Currently, California is the only state without appropriate water quality criteria for toxics. The proposed changes include updates to aquatic life and human health numeric criteria and a five year compliance schedule. The numeric criteria for some toxics are controversial because they are less stringent than before (e.g., dioxin, mercury, selenium, and PCB's). A copy of the proposed rule is available on the EPA's website (<http://www.epa.gov/owow>).

Delta Water Quality Conditions with respect to Drinking Water Supply -- Phil Wendt and Rich Breuer

Phil Wendt and Rich Breuer described current water quality issues associated with drinking water from the Sacramento/San Joaquin Delta. Specifically, they discussed the balance required between levels of microbiological contaminants and disinfection by-products when treating water to meet state and federal drinking water standards. This balance is important because the disinfectants used to inactivate microorganisms in drinking water can form carcinogenic substances, known as disinfection by-products (DBP's). The amounts of DBP's created during the disinfection process are directly related to the amounts of certain substances (e.g., bromide and organic matter) in source waters. Water in the Delta contains high amounts of bromides and organic carbon relative to the Sacramento River due to the influence of seawater and the Delta's organic soils. Water quality data for drinking water contaminants in the Delta is stored in the Municipal Water Quality Investigation Program's database. Currently, the Municipal Water Quality Investigation Program is also conducting studies on the treatment of agricultural drain water to decrease organic matter, determining the water quality impacts of flooding Delta islands, establishing a real time water quality monitoring program at Hood, developing a water quality modeling approach, conducting sanitary surveys, and compiling water quality monitoring information into a reference manual.

Issues Raised:

- Comparison of the historic amount of organic matter in Delta waters and the current amount in Delta waters. Historic amounts are unknown. High organic matter levels in Delta waters cause problems for drinking water but may be valuable in the aquatic food web. Lack of baseline historic water quality data on the levels of organic matter in Delta waters before human activity makes it difficult to determine whether the current levels of organic matter are natural or whether they have increased due to human activity such as Delta agriculture.
- The comparative costs of alternative treatment technologies (filtration and ozonation) to source protection activities. The *Bay Delta Exhibit 204* roughly estimated the costs associated with these different approaches. More research is being done on this topic and is expected this month.

Grasslands Bypass Project and San Joaquin Valley Drainage Implementation Program Issues - Wayne Verrill (DWR) and Rudy Schnagl (CVRWQCB)

Wayne Verrill and Rudy Schnagl described the background of the Grassland Bypass Project and San Joaquin Valley Drainage Implementation Program. The San Joaquin Valley Drainage Implementation Program evaluates the water quality issues associated with the San Joaquin River. Eight technical committees and a variety of stakeholders have been involved in the program. Rudy discussed the Grasslands Bypass Project. This project is a key component of the effort to control levels of selenium in water bodies south of the Merced River and north of the City of Mendota.

Water Quality Component Report - Carol Howe

Carol Howe presented the outline of the Water Quality Component Report and described the relationship between the report and the Programmatic EIS/EIR process. Carol asked that the WQTG review the document and comment on the loadings information and the action strategies, providing specific wording and inserts where possible. The Water Quality Component Report will form the basis of the Affected Environment write-up. Together the Affected Environment, No Action Alternative, and Alternative Impact Assessment write-ups will form the basis of the Water Quality Technical Appendix of the Programmatic EIS/EIR.

Issues Raised:

- Implementation/Coordination of the action strategies in the report with other CALFED activities. Category III funds are being allocated this year while other CALFED actions will be implemented beginning in Fall 1998.
- Incorporation of PAT recommendations regarding water quality values in Table 3-4. The authors did not have time to incorporate the recommendations of the PAT in this draft; however, the recommendations of the PAT will be reflected in the Affected Environment document.
- In the report, mention the program's intent to include biological assessment techniques not just chemical concentrations to determine action effectiveness.

Programmatic EIS/EIR Status Report - Rick Woodard

Rick Woodard reviewed the status of the Programmatic EIS/EIR. In September, CALFED will conduct a workshop to evaluate various approaches to impact analysis. A draft version of the Programmatic EIS/EIR is scheduled to be completed by January 1998.

Issues Raised:

- Ability of the Water Quality Technical Group to review internal documents before the Programmatic EIS/EIR is released in draft. Due to legal requirements, CALFED will not release these documents before release of draft Programmatic EIS/EIR.
- Qualitative or Quantitative approach to impact analysis. Qualitative and

quantitative analyses will be used, depending on the situation.

Water Quality Implementation Plan - Rick Woodard

Rick Woodard discussed the Water Quality Implementation Plan and its relationship to the rest of the Water Quality Program. The Water Quality Implementation Plan will refine the action strategies identified in the Water Quality Component Report to identify projects to address water quality problems.

Comprehensive Monitoring, Assessment, and Research Program (CMARP) - Rick Woodard & Bellory Fong

Rick Woodard explained the rationale for establishing the CMARP. This program will provide the critical link between the water quality data needed for assessment of action effectiveness, the types of monitoring activities that will collect these data, and the applied research needed to complement these activities. The program will allow these efforts to work in concert, rather than at cross-purposes. Bellory Fong described the relationship between the CMARP and the monitoring efforts identified in the ERPP. The two monitoring efforts will build on each other.

Issues Raised:

- Relationship between CMARP and IEP's proposed monitoring program. CALFED and the IEP are currently working together to see how these two programs can work together. The IEP proposal is a placeholder for the ERPP monitoring and other monitoring programs.
- CMARP's QA/QC program. It is important for a QA/QC program to be established early in the planning stages of the program.
- Use of a predictive model to compare monitoring results. The CMARP is currently in its infancy and is open to any and all input on this issue from the WQTG. Two suggestions were made on how to approach this issue. First, the California Department of Fish and Game uses a predictive model to anticipate young of year estimates which has been a useful tool to establish goals and determine effectiveness. Second, developing a hypothesis test as part of an adaptive management scheme would be helpful in incorporating results into decisions early in the process.
- Time lines for adaptive management and assessing effectiveness of actions need to be action-specific. For example, to determine the effects of decreased ambient copper concentrations effect on biota may require more than one year of data. A long-term program such as CALFED may require long-term time horizons.
- Performance measures and indicators of success need to be defined in order for the program to be successful. Chemical concentrations are not sufficient to determine success. Some form of biological indicator such as TIE's/TRE's or other biological effects data needs to be used to determine effectiveness. Together this information along with concentration data could be used to evaluate

whether an action strategy is effective.

- A weight of evidence approach could be used if multiple assessment methods are employed by the CALFED Water Quality Program.
- Biological effects data should include toxicity (acute vs. chronic), aerial extent, and duration. To date the CALFED Water Quality Program has used legal water quality standards as the basis for determining effectiveness because these standards are legally defensible. CALFED is not a regulatory agency and the use of legal standards limits the impression that the program is trying to establish new regulatory guidelines.
- The applicability of toxicity studies conducted on nonnative species, as identified in EPA protocols, to native Delta species is questionable. Protocols for delta species need to be developed. The ERPP is developing/addressing these protocols in the research arena.