

**Ecosystem Restoration Subcommittee Meeting
May 19, 2005
650 Capitol Mall, 5th Floor, Delta Room
Sacramento, CA
Meeting Summary**

Subcommittee members (or their alternates) and agency liaisons present:

Mike Aceituno (NOAA Fisheries)	Steve Johnson (TNC)
Gary Bobker (TBI)	Shana Kaplan (USBR)
Serge Birk (CVPWA)	Todd Manley (NCWA)
Lloyd Fryer (KCWA)	Emma Suarez (CFBF)
Gregory Gartrell (CCWD)	Bernice Sullivan (Friant WUA)
Dave Harlow (USFWS)	Tom Zuckerman (Matlock, Charles, Rowe & Co.)
Elise Holland (Trust for Public Land)	
Diana Jacobs (DFG)	

I. Welcome and Introductions

The meeting began with introductions.

Tim Ramirez replaced Dan Castleberry as Interim ERP Deputy Director. Castleberry will continue to work with ERP from his position with USFWS.

II. Subcommittee Status

Summaries from the March and January 2005 and November 2004 ER Subcommittee meetings were approved, pending two amendments to the March 2005 meeting summary:

- the NRDC discussion was missing from the draft and should be inserted;
- March 2005, page 9: “state litigation” should be changed to “stay of litigation.”

III. Ecosystem Restoration Multi-Year Program Plan

The ERP Multi-Year Program Plan was not submitted to the Authority in April as planned, when all other draft Program Plans were submitted. Changed circumstances prompted implementing agencies to revamp the earlier draft, which had been a roll-over from previous years. A revised version is planned for late June. Reasons for the revision:

- The next two years need to be considered very carefully.
 - Only two years remain before the end of Stage 1 (years 6 and 7).
 - At the same time, the conservation agreement, signed in September, will come to an end.

- Changes in fee structure (moving more responsibility to water users/beneficiaries) are causing water users to question how money is allocated. They want to know what their fees are funding, and want to be involved in setting priorities.
- The unexpected decline of Delta pelagic fish species noted by IEP should be addressed.

Jacobs, Harlow, and Aceituno are helping to redraft the MYPP to make it more specific, including determining the funds needed to address projects to which funds are already committed.

The ERP Implementing Agencies staff compiled a list (distributed as a draft handout) noting projects sorted by the following categories.

- Protect at-risk species; MSCS obligation. Approximately 80% of the projects fall into this category.
- Protect seriously at-risk investment, to make sure that no critical investments are stranded.
- Cross-program integration. Examples include the giant garter snake, which links endangered species, agricultural land, and EWA.
- Essential program function.

The list includes funding year, funding source, and funding amount. The draft list is not prioritized, although it does represent the agencies' perspective on the highest priority needs. Some of the funds are fungible, and some projects are funded from multiple sources. Some funds are earmarked, e.g., Prop 204 funds for Stockton DO and remediation for mercury, stipulated by language in the bond measure.

Jacobs asked for input regarding this draft.

Discussion

Most funds for Year 5 are encumbered (already allocated), thus the need for close collaboration on prioritization.

CVPIA needs to know what is likely to be funded in 2006 appropriations and will provide comments as soon as possible. Harlow noted that \$15 million is committed by the ROD as a CVPIA contribution, and does not specify projects.

EWP is a long-term program. Any funds not spent in 2005 will roll over to future years. Some EWP efforts (Antelope Creek, Deer Creek) have not yet led to water purchase. The MYPP will make clear that EWP is a priority and that funds should not be moved from the program.

It was suggested that the EWP funds not spent on EWP this year could be reallocated for similar projects on streams not currently in EWP's plans. For instance, water rights to benefit steelhead were acquired on crucial streams, but

although these projects have been promoted since 1999, they have not been facilitated by EWA and other water acquisition programs.

Contingency Planning, Risk Management, Vision, and Strategic Plan

Earlier, a contingency fund for emergency water acquisitions had been set aside, but it now no longer exists. The MYPP should take into account both planned and unplanned needs, including water needs. Ramirez noted that current political pressure is to specify all spending needs. If a contingency fund is needed, a clear definition of that need is necessary in order to make the case for it. Bobker offered his help to incorporate such a contingency fund into the budget.

The current Strategic Plan is not adequate for response to urgent issues that are poorly understood, such as the Delta pelagic fish population decline. The current Strategic Plan (developed in 1997) has helped ERP decide whether proposed projects fit objectives and helped clarify how to incorporate adaptive management, but because it was based on a list of projects rather than an overall vision, it lacks a vision that would integrate efforts and coordinate resources. Current work is “piecemeal:”

- DRERIP, IEP, and SP actions are not closely coordinated.
- EWA and EWP are not coordinated.
- Current ERP projects that address rapid decline in species in the Delta include Delta Studies (IEP), \$1.5 million (page 2 of draft handout). Other Program Elements are also concerned about specific causes for species decline (e.g., invasive species, salinity, pollutants).

Further, much of the current emphasis is on research rather than management.

A “Strategic Plan II” is needed, a plan that would go beyond a list of needed actions (as in the current Strategic Plan) and that would incorporate an improved understanding of ways to respond in the case of incomplete knowledge. This Strategic Plan II” is a high priority. It must do the following.

- Provide a vision for how to manage the Bay-Delta region, including its tributaries. It should be useful for choosing targets and deciding on actions.
- Allow for continued learning, with a focus on how results of research will help inform management decisions within X years (say, two years).
- Provide a framework for making decisions in the face of incomplete knowledge and understanding, including tools for managing risk. These tools should be capable of helping manage risk in operations, habitat investments, and so forth.

ERP priorities should take into account likely uses of risk management tools and their role in adaptive management.

The ERPSB's meeting May 24-25, 2005 is the last meeting of this Science Board because of contractual issues. ERP and the CALFED program in general rely on science. Contractual issues the Science Board must be solved; science must continue to be integral to program strategy and actions. The governor has been requested to intervene.

Specific Recommendations for the Draft *ERP Priority Needs for Projects and Activities through Stage 1*

Flag items that are already encumbered.

Separate out the urgent fish issues from the more general MSCS obligations list, in order to focus attention on these concerns that are very much in the public eye.

Prioritize the list of needs (difficult though that will be). This is important especially in light of the limited funding available.

Include all priority needs, not just those through Stage 1. Red Bluff Diversion Dam improvements project (years 8 and 9) is addressed in the larger draft list, which includes projects beyond Stage 1, but not in this list. This makes it appear that a high-priority project such as Red Bluff is low priority. NOTE: the MYPP addresses Red Bluff Diversion Dam improvements.

Make a case for funding high-risk, poorly understood issues (such as the current urgent Delta pelagic fish issue) by prioritizing all items on the list and separating out the urgent fish issues. This way, it will be clear to stakeholders how important the investment is—namely, important enough that authors of this document have a consensus to displace other issues that are generally accepted as high priority.

Share this list with the Science Boards and the Science Program to make sure they are concerned about the same issues, and that the priorities are similar. It was suggested that this list be given to ERPSB members for their review before their contracts expire.

Give Science Boards a specific charge so that ideas are “bottom up.”

Show cash flow, noting when money for a specific project will be spent (i.e., not all \$60 million for Battle Creek will be spent the first year).

Identify which actions are science actions, which are implementation actions, and which are mixed. For instance, is the IEP budget science or mixed? Is a monitoring project for water quality that does not in itself improve water quality a science project or a water quality project? Some thought should be given to accounting for these.

Specific Recommendations for *Draft Multi-Year Program Plan*

- Tie accomplishments (p. 8) to examples of performance measures (pp. 5, 6).
- Tie milestones (p. 9) to priorities (p. 13).
- Highlight and differentiate current and previous years (p. 10).
- Change title (p. 13) to reflect the future.
- Move schedule of past accomplishments (p. 37) to page 8.
- Color-code previous funding commitments.
- Move discussion on page 47 to accomplishments section.

b. Monitoring and Evaluation PSP Update

The Selection Panel for the Monitoring PSP is nearing the end of its approval phase. The public comment phase opened April 8. Proposals selected will be posted to the website soon. Proposed recipients of the Monitoring PSP will be presented to the Authority in August.

c. Planning for projects that assist farmers in integrating agricultural activities with ecosystem restoration

ERP staff will work with DFG staff to explore budget implications of monies for agricultural-related PSP. Recommendations will be presented to the Authority in August. This PSP includes Battle Creek. Public comment period will be mid-June through mid-July.

IV. Next Steps for the Subcommittee (Agenda Items and Meeting Dates)

a. Upcoming Agenda Items and b. Future Meeting Dates

- June 16.
 - Multi-Year Program Plan. Finalize Subcommittee recommendations.
- July 13. Joint meeting with Water Supply Subcommittee.
 - South Delta Fisheries Forum.
 - Delta pelagic fish.
 - Contingency funding.
 - Water acquisition: EWA, WAP, EWP. Discussion will include
 - (1) EWP acquisitions,
 - (2) how to identify and vet other opportunities for water acquisition,
 - (3) whether other opportunities that are not currently in EWP should be pursued,
 - (4) successes in EWA acquisitions (e.g., long-term purchase on the Yuba River),
 - (5) EWA flexibility (and implications for EWP),
 - (6) how to phase in any additional EWP in-stream acquisitions.

V. Public comments

There were no public comments.

11:00 a.m. to 1:00 p.m. Joint Session with the Drinking Water Quality Subcommittee

VI. Multi-Year Program Plans

a. Ecosystem Restoration

The ERP MYPP was held back from presentation to the Authority in April, unlike other program MYPPs, because of issues related to CALFED and ERP budget and status of Delta pelagic fish decline. The new draft takes a different approach, prioritizing projects for the remainder of Stage 1. The ER Subcommittee has extensively discussed

- presentation of information in the document, especially in terms of funding status and program priorities,
- ERP's and CALFED's response to the Delta pelagic fish decline,
- possibilities for improving mobilization of both science and funding more effectively to respond to emergency situations,
- approach to dealing with water acquisitions that have been allocated but not spent.

In June, the ER Subcommittee will finalize recommendations on the ERP MYPP, focusing on these issues and adaptive management issues.

b. Drinking Water Quality

The Drinking Water Quality Program MYPP updated finance tables, added a schedule graphic, revamped accomplishments to reflect those through Year 5, and added a geographic distribution graphic. The draft MYPP will be finalized only after the budget has been determined to make sure the funding tables are accurate. A draft will be reviewed by the Drinking Water Subcommittee in July. MYPPs will be submitted to the Authority in August.

VII. Drinking Water Quality Program Assessment (Cindy Paulson, Sarahann Dow, Brown and Caldwell)

Assessment of the Water Quality Program is a ROD commitment. This talk presented the results of program assessment.

Process

Assessment included surveys with project managers (50% return rate), interviews with project managers, and categorizing of the information. The preliminary assessment used existing water quality performance data and performance indicators (at all three levels, as defined by the CALFED program).

Feedback from the earlier draft (presented to the Drinking Water Subcommittee in February) has been incorporated.

Key Results

The final review included more comprehensive input than the initial investigation, including more drinking water intakes, more constituents, longer record, and newer tools such as fingerprinting. The study found that data and tools are not fully developed. Even with the updated assessment, it is still premature to draw conclusions. This report will provide a basis for future assessment.

Primary issues that were studied were flows for the Sacramento River, San Joaquin River, and Yolo Bypass and some constituents of concern, bromide and organic carbon. Pathogens and most nutrients were not studied in detail.

Bromide levels are higher in the fall. The ROD target is 50 :g/L. Levels were measured at Banks, Barker Slough, Rock Slough, and Tracy Intakes. Monthly average values were above the target at all sites except Barker Slough Intake.

Organic carbon has seasonal concentrations in spring. The ROD target is 3 mg/L. Barker Slough is very high for this constituent of concern in spring months. Many monthly averages are above the target.

When bromide and organic carbon are studied together, the analysis shows that together they present a particular threat.

Performance Measures

Level 1, administrative. About \$80 million total was spent for water quality project funding, including source improvement, treatment technology, science, program management, and regional planning. This includes projects funded by other programs that furthered WQ goals for a total of \$18 million.

Level 2, quantifiable accomplishments. While it is still too early to make definitive claims, there has clearly been progress toward each ROD commitment area. Twenty-seven projects will be completed by June this year, which will yield information for future assessments. There has been a shift in program focus toward ELPH (Equivalent Level of Public Health) protection action areas.

Level 3, system-wide results. It is too early in the life of the program to see definitive progress toward objectives. The program should continue toward objectives for bromide/organic carbon and ELPH.

Recommendations

There is a concern that the WQP has been underfunded, both in absolute terms and with respect to other CALFED programs (only 5% of CALFED funds go

toward WQP). The program is currently funded at 30% of the ROD estimate. Shortages in funding and staff hamper the program's effectiveness.

Strategy and funding priorities. The regional shift of focus primarily to Delta and San Joaquin River is appropriate because these are the areas with the greatest problems. Other areas should continue to be monitored to maintain quality. Smaller communities were not well represented in first round of funding. The shift in focus toward ELPH and development of focused plans should continue.

Contracting. Contracting is the most significant area in which improvement would make a difference. Recommendations include: streamline process for completing contracts, maintain consistency among contracts, distribute funds more quickly, establish realistic expectations for funding (some project managers would have planned their projects differently if realistic expectations had been set), and give more guidance for the solicitation process to make sure projects that are proposed focus on program priorities.

Communication. More direct dialogue is needed between WQP staff and project managers. Currently communication is primarily with the contracting manager. Project managers should report information regularly rather than only (or principally) in a final report. Reports on adherence to requirements should be less frequent and substantive reports more frequent. A database for tracking projects should be developed and maintained.

Coordination. There should be coordination among project managers to provide opportunities for dialogue. More communication among projects is needed, so that reports are not independent, but rather integrated. Objectives for drinking and ecosystem water quality in the Delta must be integrated. A comprehensive monitoring program for WQ in the Delta and its tributaries is needed.

Next steps and Schedule

Final draft will be complete by end of May; report will be submitted to BDPAC meeting on June 8. A CD will accompany the report containing the CALFED Water Quality Program database of survey results. It will be possible to sort by region, keyword in project title, action areas and recipient types, organizations, and grant program, and keyword in project description. Reports include summary information, objectives, performance, next steps, grant amounts, total budget, and contacts.

Discussion

All CALFED programs face the same problems with contracting. This is a state contracting issue. It was suggested that the Authority take this problem on.

Gartrell noted that contracts for study and assessment should require that the projects include an assessment like this one, and that they annually submit responses to a questionnaire. 50% return rate on surveys is much too low.

Much of the emphasis has been on studies rather than on-the-ground projects. A mechanism is needed to assure that new knowledge is turned into practical use.

The metrics and indicators used in this study could be useful for other programs, and other programs could have metrics useful to WQP. The programs need to coordinate performance measures.

Most available funding (in the WQP) has gone toward managing new projects/ contracts, but very little toward understanding what the program has learned. The ERP has a great deal of data that has not been analyzed. The ERP has documented progress over the past four years and has sponsored a monitoring PSP; other programs need to learn from its experience.

Some possible conflicts exist in goals between programs. Examples: (1) water quality has worsened since 1985 (at that time, WQ was poor 5% of the time; now it is poor 50% of the time), due partially to a change in the pump regime instituted to protect fish in spring (leading to higher bromide levels in the fall); (2) salinity is a problem for drinking water needs, but it is needed for many native species.

The focus of the WQP has been on drinking water quality, but it is starting to integrate across ERP and Watersheds Program. This will increase awareness of toxics and pesticides. ERP is committed to working with the SP on mercury.

Reed noted that the EIS/EIR specifies both an ER and a WQ program. The WQ program was intended to address both drinking water and ecosystem water quality. The ER program was intended to address water quality targets. These two programs have different approaches but similar goals. How can the approaches be merged? One possibility is to hold special meetings on particular subjects, for instance a joint Levees/ ER/ WQ Subcommittee meeting.

VIII. Toxic Blue-Green Algae (*Microcystis aeruginosa*) in the Delta (Peggy Lehman)

Blue-green algae has moved into the Delta since 1999. Colonies can be microscopic in size up to 3 inches in diameter and under the right conditions can cause the water to become as thick as paint. It is a “cosmopolitan” and global problem, apparently associated with climate change. In some areas it is a serious problem. In the Delta it is a problem July through November. It is as yet poorly understood.

Threats Presented by Blue-Green Algae

Human impacts include

- Toxicity. Blue-green algae contains microcystins, which can cause liver cancers and tumors. Some reported deaths were likely caused by blue-green

algae. Some constituents in toxic algae are suspected of being involved in neurological diseases such as Alzheimer's.

- Impacts on drinking water quality. Blue-green algae can cause organic matter production which reproduces CHNs. The algae is toxic. It can be associated with taste-odor problems.
- Water management. When blue-green algae is concentrated through water management practices, its impacts increase.
- Recreation. Blue-green algae contains a volatile component that can cause skin irritation. Ingesting small amounts can lead to flu-like symptoms.

Ecosystem impacts include

- Food web. The entire food web can be affected.
- Direct and indirect toxicity effects. Indirect effects include impairment of mechanisms necessary for individual survival, such as muscle degradation.
- DO effects.
- Water management effects. Water management regimes protect fisheries, but water management actions could concentrate blue-green algae, endangering the fish the regimes are intended to protect.
- Restoration. Restoration actions should not be undertaken that would increase blue-green algae populations. Environments with low water flow facilitate its growth.
- Productivity. Environments with blue-green algae experience a shift in productivity toward smaller zooplankton, leading to an overall decrease in productivity.

Studies

Little is unknown about this organism in the Delta. It is unclear whether the population is increasing. Study goals for 2003 and 2004 included the following:

1. Determine spatial & temporarily variation of bloom.
2. Assess bloom toxicity.
1. Determine effects on food web.

Methods. Sampled phytoplankton biomass, ancillary water quality data. Samples were taken with a horizontal net tow. Blue-green algae migrates vertically over the day, but a vertical column sample was not taken because of possible contamination.

Findings

2003 study sampled 16 stations, Benicia to Mokelumne River to Tracy. All had this organism and all were toxic.

2004 study was more focused. All samples were toxic. Different strains contain varying levels of toxicity of different microcystins. Biomass and toxicity were not linear. Greater biomass did not necessarily mean more toxicity.

Highest biomass was Mildred Island, a shallow-water habitat up to 15 feet deep. Biomass varied seasonally, was highest in September, and was highly variable. Bloom was toxic in all locations.

The highest toxicity was in the Sacramento River and Brannon Island.

Microcystis toxins were found throughout food web—algae, zooplankton, amphipods, worms, jellyfish, clam. Some organisms recognize blue-green algae and don't ingest. Others, such as benthic feeders and feeders on amphipods, bioaccumulate the toxins.

Summary

There is a new blue-green algae bloom July through November in the Delta. The blooms is toxic, causes liver cancer, and is a bioaccumulator. Bloom toxins enter the bottom of the food web. Ambient toxicity of the largest colonies were below the World Health Organization's advisory level for drinking water quality. Long-term impacts of the bloom on drinking water and ecosystem water quality are unknown. Water management implications are broad.

Discussion

Study plans for this year and the future are intended. Fish sampling will be included. This group was in the first round of selection for the Science Program's PSP and hope to receive funding.

Member of the public noted studies in the 1970s and 1980s that mixing increases blue-green algae populations (in contrast to this study's conclusions). Less algae was present on the surface, but more was distributed through the water column.

It was suggested that an intake be used for sampling.

It is unclear why blue-green algae appeared in 1999. It was suggested that studies be undertaken to determine likely causes. Lehman agreed that would be useful but stressed that emphasis should be on developing a management plan.

It was suggested that a literature search on this issue would be productive. Coupling such a study with a field study focusing on fish would be valuable.

IX. Stockton Dissolved Oxygen Project Update (Mark Gowdy, Central Valley Regional Water Quality Control Board)

The TMDL for dissolved oxygen (DO) is required by state and federal law. Sources and load limits that contribute to any problem must be identified and regulatory actions must be specified.

The Stockton Deep Water Ship Channel (DWSC) is impaired for DO between Stockton and Turner Cut. Objectives are 6 mg/L between September 1 and

November 30 and 5 mg/L for the remainder of the year. Currently, levels are as low as 1 mg/L. There is seasonal and yearly variability, worse during dry years. The principal impact is on fisheries; low DO blocks migration of salmon. Low DO is also generally bad for aquatic ecosystems.

Causes include the following.

- The San Joaquin River deepens from 10 to 15 feet deep to approximately 35 feet near Stockton to accommodate passage of ships. The greater depth slows flow and increases residence time, allowing more time for oxidation.
- Algae carried north on the San Joaquin River dies when it reaches the deeper water; the dying organisms decrease DO levels.
- Ammonia levels are high in Stockton; runoff into the river decreases DO.

D-1641 of State Board required TMDL be implemented for the DWSC. TMDL timelines adopted by California RWQCB in January 2005 include (1) load studies by 2008, (2) regulatory actions & recommendations for non-load factors, (3) more detailed allocation by 2009, and (4) compliance with allocations by 2011.

Actions to address non-load factors include (1) requiring discharge permits and Section 401 certifications for any new channel deepening; (2) altering Basin Plan recommendations for USACE, water resources agencies, and the SWRCB division of water rights so that that the effect of reduced flow be considered in any water rights proceedings or decisions; and (3) other measures identified by the local board.

While RWQCB can require studies, CBDA has a good opportunity now for these studies to be done as part of the CALFED effort. Three basic issues need to be resolved: where the DO problem originates, in particular which watershed(s); how DO levels change through the channel; and what happens in DWSC.

CALFED/CBDA work has engendered an environment in which that both stakeholders and experts can have input into the process. A peer review of studies was done in 2002 and further CALFED-funded studies have been done or are ongoing. These include (1) preliminary studies, (2) identification of sources, and (3) 3-D modeling studies of the DWSC to understand mechanisms for mixing. A demonstration of the effectiveness of aeration (pumping oxygen into the channel) is likely in the near future. CALFED hopes to fund studies on algae transport through the river and the ecosystem impacts of algae.

For more information:

- DO TMDL website: www.sjrtmdl.org
- Regional Board website: www.waterboards.ca.gov/centralvalley

Discussion

The RWQCB does not have authority over existing facilities and cannot place controls on future dredging of the DWSC. It will have authority over future facilities.

X. Central Valley Drinking Water Policy (Karen Larsen, CVRWQCB)

Will discuss current regulatory framework, need for drinking water policy, workgroup for development of policy, progress, future steps

Drinking water quality in the Central Valley is regulated by the Clean Water Act, the Porter-Cologne Act, and the Safe Drinking Water Act. The Sacramento and San Joaquin River Basin Plan governs sources of drinking water and DHS maximum contaminant levels. Despite laws and plans in place, regulations are not implemented in a coordinated matter. Drinking water quality is not well enough regulated or tested. During sanitary surveys in 1990, WQ was not adequate to meet needs. CALFED ROD 2000 required comprehensive drinking water quality policy by 2004.

Protecting water quality involves the “multiple barrier principle,” which ensures water quality through source protections, treatment effectiveness, and distribution integrity. This presentation addresses source protection.

The Central Valley Drinking Water Policy Workgroup is a stakeholder organization that intends to develop policy in a technically sound fashion. It provides funding and technical assistance to the CVRWQCB.

Developing policy will involve several defined steps.

- A technical work plan was developed in January 2003, and has since been refined. Further refinement will require a monitoring database, conceptual models, pollutant load evaluations, and a range of water quality goals and control alternatives. Technical studies are planned to be complete by early 2007. Water quality monitoring will be implemented starting in 2006.
- Stakeholder outreach will assure that policy meets needs of various stakeholder groups to the greatest extent possible.
- A Regional Board (CVRWQCB) will adopt a resolution.
- This resolution will ultimately lead to a Basin Plan amendment, including water quality objectives, a policy statement, and an implementation plan. The Basin Planning process is planned to begin in mid-2007.
- Policy adoption is expected by mid-2009.

Sources of funding include CUWA/SRCSD MOU, EPA, Prop 50, Sacramento River Watershed Program, and CBDA Drinking Water Program.

Considerable progress has been made to date, including

- Technical planning. Report on available data, RFP for conceptual model work, organic carbon workshop (both drinking water and ecosystem restoration water quality; held January 2005), process for prioritizing constituents, and database development (August 2005 input of organic carbon data; October 2005 input of nutrient data).
- Stakeholder outreach. Fact sheet, stakeholder debriefing, webpage and listserv.
- Regional Board resolution. Resolution adopted July 2004, provides regulatory setting, includes CALFED goals.

For more information, see

- www.swrcb.ca.gov/rwqcb5/available_documents/do-policy/index.html
- larsenk@waterboards.ca.gov

Discussion

Participants in the organic carbon workshop included scientists; one intention of the workshop to was elicit input from ecosystem restoration experts.

It was suggested that a conceptual models be reviewed by a science panel.

Basin Plan addresses non-point source issues.

Policy will include control of sources as well as treatment. Conceptual models will address the options.

Upcoming ER Subcommittee Meetings

June 16 and July 13 (tentative; Joint meeting with Water Supply Subcommittee). See *IV. Next Steps for the Subcommittee (Agenda Items and Meeting Dates)*.