

**Sacramento River Watershed Program
Monitoring and Toxics Subcommittees
Joint Meeting**

**August 25, 2004
SRWP Coordinator's Office
Woodland, CA
9:00 a.m. – 4:00 p.m**

Attendees

Stephen Clark, Pacific EcoRisk
Karen Larsen, CVRWQCB
Ken Lerch, Stakeholder
G. Fred Lee, G. Fred Lee & Associates
Kathy Russick, SRWP Coordinator
Claus Suverkropp, Larry Walker Associates
Tom Grovhoug, Larry Walker Associates
Sheryl Gill, DPR
Kris Walters, SRCSD
Otis Wollan, SRWP
Ryen Bonea, Sutter-Yuba RCD
Lori Webber, CVRWQCB
Brock Berstein, Stakeholder
Timmarie Hamill, BCCWA
Cecilia Curry, Harris & Company

Facilitation: Otis Wollan, SRWP
Minutes: Cecilia Curry, Harris & Company

Agenda

- I. Introductions, Meeting Minutes, and Agenda Review
- II. Education Workshop Report – Kathy Russick
- III. Compendium Status – Claus Suverkropp
- IV. Strategic Plan – Otis Wollan
- V. Monitoring Update – Stephen Clark
- VI. Liaison Report – Kathy Russick
- VII. Phase X Funding – Kathy Russick

VIII. World Monitoring Day – Holly Sheridan

IX. Next meeting

Handouts

Agendas:

August 25, 2004, July 28, 2004 and February 25, 2004

Minutes:

July 28, 2004 and February 25, 2004

Articles:

An Outline for an Intrapreneurial Business Plan

Sorting things out – which organizations should do what

I. Introductions, Meeting Minute Approval, and Agenda Review

Introductions: Meeting participants introduced themselves.

Agenda Review: The agenda was reviewed to familiarize everyone with the day's activities.

Minutes Approval: The minutes were approved with no changes. Request was made that handouts be posted on website in PDF format in addition to the minutes.

II. Education Workshop Report – Kathy Russick

The education workshop “Designing and Maintaining a Water Quality Monitoring Program” was held on August 19 at the Chico Masonic Family Center. The workshop was funded by the Resources Legacy grant and organized through SRWP Public Outreach and Education Subcommittee (POES). The workshop was well attended by many different interest groups within the watershed and the feedback from the attendees was positive. The goal for this workshop was to identify and target groups that had new watershed coordinators. Throughout the day there were sixteen presentations and fourteen poster displays. Among some of the highlights of the day was a presentation by Janet Cohen who discussed different ways in which watersheds can obtain funding, provide citizen monitoring, and establish program sustainability.

III. Compendium Status – Claus Suverkropp

Claus Suverkropp, Larry Walker Associates, indicated that the draft compendium report would be ready for distribution in September. Review and discussion will take place at the

October 21st meeting. Tom Grovhoug reiterated that we need to identify what programs should be addressed and what the SRWP can realistically monitor. Ninety nine percent of existing monitoring efforts have been identified with the exception of some CALFED and USGS monitoring. The compendium can help us understand if there are gaps and to make sure the mainstem monitoring fits solidly into the picture. Tom indicated that very few people are monitoring the range of constituents that SRWP is monitoring on the mainstem. This maybe due to the fact that people assume the SRWP is already doing it.

It was noted that the compendium should be used as a tool to assist in filling knowledge gaps regarding monitoring within the watershed. It should not come before the SRWP strategic planning effort. The compendium is documentation of what has happened in the watershed through SRWP monitoring efforts and that information should be used in pre-design of a detailed monitoring program.

IV. Strategic Planning – Otis Wollan

Otis reviewed the process that the Subcommittee had developed and refined at the July meeting. At that time, five strategic areas on which to build the strategic plan were identified. The areas identified were:

- Mainstream Monitoring
- Watershed Health
- Coordination Assistance
- Special Studies
- System Management

Items that need to be considered as the strategic plan is developed include the current SRWP funding stream (State and Federal funds) versus where funding will be coming from in the future – an unknown. In addition, the Strategic Plan and funding opportunities will be brought to the Board of Trustees (BoT) and will need to make good business sense. This transition from quasi-governmental consensus organization to a non-profit organization will be critical and challenging. Tom Grovhoug reiterated that we need to identify the rational of how money is being spent on monitoring and what questions are being asked and answered with the monitoring that has taken place. Based on the July workshop, the next step and goal of the strategic planning effort was to determine and identify the problem statement of each of the five areas.

Mainstem Monitoring Problem Statement:

Focusing on the mainstem and looking at mainstem monitoring in a broader context the following questions was raise: (1) Are conditions in the mainstem supportive of beneficial uses? What are appropriate indicators? (2) Are predictive future conditions

supportive of the beneficial uses in the mainstem? (3) How are we doing in monitoring beneficial uses? Discussion on these questions is found below:

1. Are conditions in the mainstem supportive of beneficial uses?

The spectrum of the mainstem uses to be considered include:

Aquatic Life	Recreation	Fish Tissue
Drinking Water	Sport Fishing	Flood Control
Water Conveyance	Water Management activities	

The business model should convey that as questions arise about beneficial uses and uses of the mainstem monitoring the BOT should come to the Monitoring Subcommittee for their recommendations. The Subcommittee has a many resources and can provide valuable information. The key element will be to develop understandable and answerable questions and identify appropriate monitoring tools. The Subcommittee decided to develop five questions for the BOT to determine the purpose of the monitoring program and how they would address the questions. Departing from a technical discussion to a user friendly discussion would be optimal for the Board and for the Subcommittee.

The following questions were selected and indicators discussed:

- Is the river ecosystem fully supportive of aquatic life and wildlife?
Indicators may be water management, projections, types of flows, releases and timing, wildlife survey and population, bank assessment, fish screen issues, fish take etc.
- Is the water safe to drink?
Address best indicators, groundwater issues, pathogens, chemicals, MCL's, DHS surface water, smell, taste, aesthetic quality. Different parameters need to be determined.
- Is the aquatic life safe to eat?
Indicators may be mercury levels, levels of other contaminants such as persistent organics, trace metals, PCB's, and pesticides, consumption patterns i. e. specific species, how often, and unrecognized pollutants.
- Is the Sacramento River safe and attractive for recreation?
Indicators may be aquatic and sediment toxicity, endocrine disruptors, California Toxic Rule Standards, sediment and sedimentation, habitat location, temperature, dissolved oxygen, nutrients, contaminants, pH, water flows timing and management, invasive species, metals, odor, turbidity, invasive species, ecologically significant species, etc.

2. Are predicted future conditions supportive of the beneficial uses in the mainstem river?

- What is the effect of land use and land use changes on the watershed health?
- What are the impacts of water management changes on the river water quality?

3. How well are we doing in monitoring beneficial uses?

§ The SRWP should conduct both an internal and external program review. Questions to address in the reviews would include: are we monitoring at the right places at the right times; is our data useful to customers, and how are we getting the news out to our customers?

Watershed Health Problem Statements:

1. What is the health of the Sacramento Watershed?

§ Indicators that may affect the watershed are land use changes effecting water quality in the mainstem and tributaries, six years of data that might point to land use changes or could we point to the future, BMP effectiveness, and adequate habitat for wildlife.

Are conditions in the mainstem rivers supportive of the beneficial uses?

§ Indicators may include ecosystem integrity and changes in land use affecting water quality.

Are conditions in the tributaries supportive of beneficial uses?

How do conditions in the tributaries affect beneficial uses in the mainstem river?

Are there trends in water quality that can be attributed to land use changes?

2. What characteristics of the watershed effect conditions of beneficial uses in the rivers?

§ Indicators may be land use changes, BMP effectiveness, flux of pollutants and water, numbers, types and characteristics that are desirable, i.e. animal life, and terrestrial, aquatic life

Special Studies:

It was determined that there could be a reassignment of the special categories list to either Watershed Health (WH) or to Mainstem Monitoring. (MM). The following were reassigned to the following area:

Methylation of mercury	WH	Is BMP working	WH
Expand upstream	WH	Remote Sensing	WH

Sac reversal of salmon	MM	Endocrine disruptors	MM
Continuing Hg Monitoring	MM	Measuring watershed health	MM
Intensive Monitoring	MM	Focus on few tributaries	WH
Additional creeks to be studied	WH	Mosquito abatement and West Nile	Coordinated assistance

System Management:

It was determined that there could be a reassignment of the system management categories list. The following were reassigned:

Tracking trends for valley	WH/MM	Westside RCD	WH
BMP effectiveness	WH	Point Sources	WH/MM
Non Point Sources	WH/MM		

Watershed Health management focus is on the tributaries. Otis Wollan, Claus Suverkropp, Tom Grovhoug, and Kathy Russick will review the information from the strategy session and send it to the Subcommittee for review.

V. Monitoring Update – Stephen Clark

Stephen Clark reported draft results from “Event 48”. Data are not considered final until after completion and submittal of the Annual Monitoring Report. The samples for this event were collected June 9-11, 2004.

Aquatic Toxicity - *Selenastrum capricornutum*: None of the samples were toxic to the algae.

Aquatic Toxicity - *Ceriodaphnia dubia*: Significant survival toxicity was observed for the Sacramento River above bend Bridge (SRABB), Sacramento Slough (SACSL), Feather River near Nicolaus (FRNIC), Arcade Creek at Norwood Avenue (ARCNW), and Sacramento River at Freeport (SRFPT) samples. Significant reproduction toxicity was observed for all of the remaining samples. Survival toxicity was persistent upon retesting of the SRABB and FRNIC samples, and decreased for the SACSL sample, however, reproduction toxicity occurred during the follow-up testing of the SACSL sample.

Following approval from the Toxicity Focus Group, Toxicity Identification Evaluations (TIEs) were performed on the Feather River near Nicolaus and Sacramento Slough samples on 6/17/04. Both samples exhibited complete mortality in the TIE, and toxicity was removed in the C-8 treatment (removes organic constituents) and at least partially removed using PBO (removes toxicity due to metabolically activated substances, including some pesticides). There were no detectable levels of organophosphate pesticides (i.e., diazinon and chlorpyrifos) in these samples.

TIEs were also performed on the SRABB, SRFPT, and ARCNW samples on 6/24/04; none of these samples were toxic in the TIE.

Aquatic Toxicity - *Pimephales promelas* (fathead minnow) Significant fathead minnow survival toxicity was observed for the Sacramento River above Bend Bridge (SRABB), Sacramento River at Hamilton City (SRHAM), Sacramento Slough (SACSL), Feather River near Nicolaus (FRNIC), and Sacramento River at Freeport (SRFPT) samples. Retesting of the SACSL, FRNIC, and SRFPT samples indicated that the sample toxicity increased during the holding of the samples.

Event 49 (July 24, 2004) also showed toxicity to fathead minnow at several sites. Stephen will contact the Toxicity Focus Group to discuss the findings and analyses for these samples.

VI. Kathy Russick - Liaison Reports

§ The SRWP General Stakeholder meeting will be held on November 3 in Redding at McConnell Foundation Lema Ranch. About two-thirds of the general stakeholder meeting will focus on collaboration, followed by a tour of Sulpher Creek restoration project, Turtle Bay, and Sundial Bridge.

§ The July newsletter is complete and available, and preparation for the next newsletter is underway. It is anticipated that the next newsletter will be available in December 2004.

§ The SRWP was awarded a Proposition 50 grant and is expected to be considered with the first group to receive contracts.

§ The SRWP Board of Trustees is developing a strategic plan. This will help the program obtain funding and the exercise has helped bring the Board and the Monitoring and Toxics subcommittees in sync.

VII. Phase X Funding – Kathy Russick

Request was made and approved to move this report to the October meeting due to length of meeting.

VIII. World Monitoring Day – Holly Sheridan

Holly was unable to report on World Monitoring Day due to technical problems.

IX. Next Meeting:

The next meeting will be held on October 27, 2004 in Woodland from 9:00 a.m. to 3:30 p.m.