

**AMERICAN RIVER WATERSHED GROUP**  
**August 18, 2005**

The meeting of the American River Watershed Group (ARWG) meeting was called to order by Bill Templin, American River Watershed Coordinator at 10:16 a.m. at the Auburn Recreation District Canyon View Community Center located at 471 Maidu Drive, Auburn.

**Present:** Bill Templin, American River Watershed Coordinator; Rich Gresham, Stewart Feldman and Katie Maloney, Placer County Resource Conservation District (PCRCO); Kevin Roberts, Sierra Pacific Industries (SPI); John Lane, Teichert Aggregates; Tim Dabney, USFS; Mal Toy, Placer County Water Agency (PCWA); Rick Humphries, State Water Resources Control Board (SWRCB); Bill Christner, ECORP Consulting; and Theodore Back.

**Check-In:**

Bill Templin led the "Check-In" procedure that entails telling who you are, how you are, if you have any time constraints, bring forth emergent issues, and express individual expectations.

**Review & Approval of Minutes:**

No changes were made to the June 16, 2005 meeting minutes.

**Additions to the Agenda:**

No additions were made to the agenda.

**Abandoned Mines and Their Effect on Water Quality:**

Bill Templin introduced Rick Humphries, Geologist for the State Water Resources Control Board (SWRCB).

Rick gave a PowerPoint presentation about *Mercury in the American River Watershed - a Mining Legacy*. Rick gave an overview of the historical use of mercury in gold mining during the Gold Rush. It had been thought that mercury used in historical mining practices had long ago been flushed through the system, but elevated mercury levels found in biota evidences the fact that mercury is currently present in the food chain leading the SWRCB to explore current mercury loading in watersheds upstream of the San Francisco Bay/Delta.

Rick reported the Bear River Watershed Mercury Study will serve as a model for potential studies in other watersheds. He noted the Bear River study showed the transport of mercury in the watershed as indicated by the mercury study conducted at Camp Far West. Mercury is transported in fine sediment during spring rains, although sediment transport tends to be slow with dams and diversions slowing the delivery downstream. Air deposition is also an area of interest with CA Fish & Game planning to explore that avenue of mercury dispersal in the near future.

Rick identified historical hydraulic gold mining practices, mercury lost during instream and river bar mining, and atmospheric dispersal as sources of mercury. Tons of mercury were lost in historical mining practices with mercury still being easily found in area rivers. A re-estimation of mercury is resulting in a prioritization of potentially contributing watersheds. The Bear River watershed experienced high intensity hydraulic mining and the Dutch Flat tunnel is contributing mercury directly into the Bear River. The Red Dog Pit, a 200 acre gravel pit creates concerns about stormwater runoff from the site.

Studies conducted at Lake Natoma below Folsom Dam resulted in the posting of fish advisories for children and pregnant women.

Mercury comes in several forms; methyl mercury which is bio-available and can enter the food chain which then bioaccumulates and biomagnifies, elemental mercury used and lost by miners

can be found on river bottoms and can be transformed into methyl mercury, and inorganic mercury, oxidized mercury that is also easily transformed into methyl mercury.

Rich briefly reviewed the mercury cycle and the conditions need to transform mercury into methyl mercury in which environmental factors come into play.

The group asked if we know enough about watershed systems to predict the success of any management measures that may be put in place. Rick noted a better understanding of individual systems is needed.

The group inquired if developing a characterization of the watershed system would be a worthwhile goal and Rick indicated it could be a very helpful tool.

Rick stressed the need for a watershed wide evaluation of mercury levels in biota, sediment transport data, and a better understanding of how and when mercury moves through a system.

Rick noted that mine cleanups are worthwhile if they have substantial local benefits, if they remove large amounts of mercury, or stop mercury loading to an impaired watershed. He noted there are plenty of candidate sites located on state and federal lands.

He stressed even with the removal of mercury from affected watersheds you would not see a discernable change in biota levels both within and outside of the watershed for a long time.

Rick stressed the importance of well characterizing sediment and its movement through the watershed in the ARWG Sediment Study currently being conducted.

Bill thanked Rick for his input regarding the sediment study and his time to address the group on mercury issues.

Rick noted the largest mining pit in the American River watershed was Michigan Bluff and stressed that it is time to step back and take a look at entire system dynamics vs. isolated areas.

Group discussion revolved around recycling programs, dam removal and sediment dredging activities, and fish habitat improvement projects using gravel extracted from behind dams and potential for mercury methylation.

Rick closed by noting the San Francisco Bay/ Delta Total Maximum Daily Load (TMDL) is the driver in the State Water Resources Control Board's effort to improve the mercury situation in the Bay and mercury efforts in upstream watersheds.

#### **Activity Updates:**

- ***Sediment Dynamics Study:*** Bill handed out copies of Tetra Tech's monthly progress report for July 2005 and briefly reviewed progress being made in a data gathering and review phase. Discussion revolved around the importance of identifying and filling data gaps during this data collecting phase.

Bill noted the looking forward to the next step that will involve mapping of the project area.

It was noted that Mal Toy or Marie Davis are the contact points for information and/or feedback regarding the sediment study.

- ***Watershed Coordinator:*** Bill briefly reviewed his activities over the past month, and handed out copies of his activity report dated August 16<sup>th</sup> and solicited questions and comments.

### **Stakeholder Reports:**

- *Placer County Fire Safe Alliance:* Rich Gresham reported no progress on the map that will identify areas where fuel load reduction and other fire risk reduction efforts should be focused.

Rich reported the desire to continue discussion with the ARWG regarding potential projects and noted the RCD is working with USFS to put in place \$300K in funding for the continuation of The Placer County Chipper Program and Fire Safe Inspection Program.

Group discussion revolved around the identification of additional water sources on private property that could be used for fire fighting efforts and the potential for these kinds of private water sources to provide a false sense of security for the property owner.

Rich reported attending Cal EPA workshops for the next Consolidated Grant Process. Fire folks will be pursuing fire safe issues like healthy forest and vegetation management efforts that will be community based.

Rich encouraged the group to think about developing a project for funding consideration.

- *Placer County Water Agency:* Mal Toy reported the agency is moving forward with FERC relicensing related studies to be release early-mid 2006. He noted working with USFS and other agencies to develop study parameters. PCWA is looking to acquire resources data and will share once they are ready along with beginning a public process.

It was noted that PCWA's current monitoring efforts are highlighting the challenge of monitoring equipment placement with access being the limiting factor in targeting monitoring sites.

Successful monitoring tips were shared by Kevin Roberts about how to keep challenges like vandalism and removal of monitoring equipment to a minimum.

*Recreation Subcommittee:* Bill reported on RCD Director Greg Nau's suggestion to explore the formation of a foundation modeled on the highly successful Henry's Fork Foundation focused on Idaho's Snake River and his exploration over the last three months of community interest regarding the idea.

Bill handed out copies of a PowerPoint presentation being used to poll community interest in the potential formation a North Fork American River Foundation. He noted finding the presence of large trout in his watershed travels and showed photo monitoring of "Aquatic Vertebrate Assemblages" he has gathered within the watershed.

Bill noted he has found support for the idea and will continue to explore options and opportunities regarding the potential formation of a foundation.

- *Regional Watershed Coordination Update:* Bill reported regional meetings have been focused on information sharing and recreation issues related to the Rubicon Trail.
- *Volunteer Monitoring Progress (WES 2005):* Bill reviewed past efforts and current plans for the stream assessments and student exchange program and the plans to expand the study area.

Rich Gresham reported Register Professional Forester Doug Ferrier is teaching Foresthill High School students about healthy forest concepts and indicated hopes of expanding the program to include wildlife education.

- *American River Watershed Institute (ARWI)*: Bill reported that school duties preclude Harry Hickman's attendance of ARWG meetings. He noted the ARWI program is evolving into a college student level research and education program with the ARWI having hosted Sacramento State students this summer and are expecting UC-Santa Barbara Masters students before summer is over.

**Open Discussion:**

- Rich Gresham announced the RCD is hosting a tour for the CA Association of RCD's Forestry & Fuels Management Committee and CA Forestry Stewardship Coordinating Committee that will tour Bear Valley Meadow restoration efforts and PG&E and SPI timber management practices and post fire rehabilitation efforts. He gave details for those interested in attending the tour.
- Bill Templin passed around Sierra Nevada Conservancy License Plate re-registration forms.

**Next Meeting:**

The next regular meeting will take place on September 15<sup>th</sup> at the Canyon View Community Center.

**Adjournment:**

The meeting was adjourned at 12:10 p.m.