County of Yolo

PLANNING, RESOURCES AND PUBLIC WORKS DEPARTMENT

292 West Beamer Street Woodland, CA 95695-2598 (530) 666-8775 FAX (530) 666-8728
www.yolocounty.org

JOHN BENCOMO
DIRECTOR

Cache Creek Technical Advisory Committee

Summary Minutes
October 3, 2005

Members in Attendance:	Kevin O'Dea, Jeff Hart, and Geoff Schladow.
County Staff:	Dimitrios Georges, Brett Williams, and Petrea Marchand.
Others in Attendance:	John Watson, Barry Cavanna, Chad Roberts, Max Stevenson, Jack White, Jenny Drewitz, Ben Adamo, Mark Hirzy, Duane Chamberlain, Jeannette Wrysinski, Mary Kimball.
Members Absent:	None.

1. CALL TO ORDER

The meeting was called to order by Chair O'Dea at 10:05 AM

2. PUBLIC COMMENTS

None

3. ADOPTION OF MINUTES

The minutes of the September 8, 2005 meeting were adopted.

4. STAFF UPDATE

4.1 Update on the Water Quality monitoring report for August 2005 prepared by Foothill Associates: Staff reported that Foothill completed the summer sampling and has submitted a draft report for review and comment. The draft was posted to the Parks & Natural Resources web site for public comment.

4.2 Update on Jesus Maria reach proposal by Kevin O'Dea: Staff has solicited a proposal from Chair O'Dea to provide a report on the changes in the stretch of the creek from approximately CR 18 to I-5. The report will be used as background for possible preparation of engineering plans for stabilizing the creek banks.

4.3 Status of Ayers agreement: Staff has notified Ayers that the County has decided to terminate Agreement #04-67 between Ayres Associates and the County. Ayers has been performing aerial photography and digital terrain modeling of the CCRMP area since 2004.

4.4 Update on the Grube-Payne project: Petrea Marchand, Water Resources Coordinator, reported that the Natural Resources Conservation Service (NRCS) is working on plans to control the run off from the Grube property. The erosion control plan will direct water west to a filtration area outside the CCRMP boundary. Petrea advised that a special meeting of the TAC may have to be called to review the plans when completed by the NRCS.

4.5 Water Resources Association (WRA) grant for development of the Yolo County Integrated Regional Water Management Plan: Petrea advised that the Water Resources Association (WRA) has announced that the Yolo County Integrated Regional Water Management Plan (IRWMP) was awarded a grant for $500,000, which includes covering the costs of engineering for water projects. She advised that Yolo County will apply for additional grants to construct water oriented projects in the future.

4.6 Cache Creek Conservancy project updates: John Watson, Project Manager for the Conservancy announced that their education program is serving students from throughout Yolo County, Sacramento, and Vacaville.

6. COMMITTEE REPORTS:

Geoff Schladow announced that the Federal Emergency Management Agency (FEMA) has issued a "Notification of Intent" to solicit emergency planning proposals (possibly prompted by the recent flooding in Louisiana). Part of the planning services may include the feasibility of creating a flood warning model for the Sacramento Delta area, which may include Cache Creek.

Petrea Marchand stated that MBK, a local engineering firm is scheduled to brief the Board of Supervisors at its regular meeting of 10-4-05 on the changes in the State and Federal policies regarding local levees along the Sacramento river and the need for additional technical studies.

7. REGULAR AGENDA:

7.1 Presentation by Geoff Schladow on the Sediment and Turbidity monitoring program for 2004. Geoff made a PowerPoint presentation on last years monitoring studies of Cache Creek at six locations from Rumsey downstream to I-5. The purpose of this first year study was to provide baseline data on sediment concentrations and turbidity along lower Cache Creek. The sampling was conducted on a monthly basis and during peak precipitation events (full report is posted on the County web site: www.yolocounty.org/prm/resmanage.htm and hard copies are available upon request from staff.

The turbidity probe used at each station was calibrated before each use. At each monitoring event, a reading was taken every 30 seconds in order to get 3 measurements that are consistently average to each other. 150-ml water samples are taken and checked by the Lab for (dry) weight and for turbidity.

Data from this first year study will be utilized in forming a baseline for future planning and near channel activities. One of the major considerations is the introduction of mercury into the water column through sediment deposited in the creek, especially at the Gordon Slough discharge point where the canal water returns back into the creek. Geoff advised that particle size distribution was not measured, but could be included in future research.

County staff has extended the contract with Geoff for an additional year of Sediment and Turbidity monitoring.

7.2 Vegetation monitoring effort by Jeff Hart and possible use of LiDAR technology for future digital terrain modeling. Jeff has been researching the possible options for mapping of the vegetation and presented a variety of alternatives. He suggested the following strategy to acquire the necessary data for the annual report:

a. Conduct vegetative surveys at the 13 existing transects.
b. Analyze and collect monitoring data on all restoration projects along the creek.
c. Map vegetation types with a fall color flight (current black & white orthophoto's are not usable for mapping and ground truthing).
d. Digitize and map the data on GIS.

Jeff suggested that the use of LIDAR (**LI**ght **D**istance **A**nd **R**anging, also known as Airborne Laser Swath Mapping or ALSM) for the mapping of the vegetation of Cache Creek. This is a relatively new technology that employs an airborne scanning laser rangefinder to produce accurate, detailed topographic and vegetation surveys. In its simplest form, a LIDAR sends a short pulse of light energy from a laser to a target. The time it takes for each pulse to complete a round trip to and from the target is converted into a direct measure of the elevation of the target. A first-reflection LIDAR measures the distance to the leading edge of the first laser reflection, typically the first non-air surface the outgoing light pulse encounters, such as the surface of a sandy beach or the tops of the trees in a forest. Staff will explore the possibility of utilizing the technology for future mapping of the vegetation and possibly the terrain in and around the creek. The TAC suggested inviting an expert on the use of LIDAR to make a presentation at an upcoming TAC mtg.

Jeff suggested that staff solicit proposals from local Photogrammatry companies to perform a fall color flight to map the vegetation along the creek. This will help to establish a baseline for future vegetative mapping.

7.3 Discuss section assignments of the CCRMP annual report. Staff handed section assignments to the TAC and discussed the various sections and possible authors. Staff will continue to author the sections of the report with input from the TAC, staff, and possibly select consultants.

The next regular meeting of the TAC is tentatively scheduled for November 7, 2005.

The meeting was adjourned at 12:10 PM