

COSUMNES RIVER TASK FORCE

Oversight Committee
January 14, 2003
USDA Service Center
7:00 PM – 9:15 PM

Minutes: Tina Lunt, Cosumnes River Task Force

1. Welcome and Introduction: Bill Mosher (Sloughhouse Resource Conservation District) opened the meeting at 7:00. Self introductions were made by Walt Hoppe (Elk Grove Resource Conservation District), Craig Crouch (Sacramento County DWR), Frank Jerauld (Amador RCD), Marv McCauley (Sloughhouse Resource Conservation District), Keith Whitener (The Nature Conservancy), Carl Werder (US Bureau of Reclamation), Rene Leclerc (Northwest Hydraulics), Scott Frazier (Jones & Stokes), Larry Rodriguez (Robertson-Bryan, Inc.), David Utterback (Reclamation District 800), Bill Cunningham (NRCS), Rick Bauer (Landowner) and Surjit S. Toor (Natural Resources Conservation Service).

2. Cosumnes River Resources Inventory, Phase II, Scott Frazier and Rene Leclerc

2.1-1.6 Jones & Stokes (2.1 has been completed) - Scott Frazier Reporting

2.7-2.8 Northwest Hydraulics, Inc - Rene Leclerc Reporting

Scott Frazier Status Report

2.2 Characterize Observed Erosion

In this subtask J&S is working on locating erosion "hot spots" (areas with a disproportionate amount of sediment per subwatershed). In addition to the benefit of location eroding areas, insights into land use trends may also be found.

Areas of mass erosion were marked on the map, (equal to or more than 5 acres) as a point feature; the site was then visited, measured and photographed.

2.3 Land Use / Land Cover

Initial reclassification of July 2002 satellite imaging is completed. Images were classified into 18 land use/cover categories. The ~1980's land use map is complete and the 2002 (recent) land use map is almost complete and will also be assigned values.

2.4 Unsurfaced road maps

Unsurfaced roads are potentially contributing sediment. J&S will be using existing data from the National Forest which is in good shape, Tiger Line which is okay but only shows major roads and will be hand digitizes others to have as complete map as possible with in the time frame and budget of this project.

2.6 Inventory Stream Bank Erosion

Streams are being classified through mainly through aerial and topographic maps. In addition to these maps, in the lower watershed, erosion is being pin pointed through air flights and on the ground field collection. Erosion sites in the upper watershed are verified through on-the-

ground field collection. Channel type and areas eroding are being documented. The channel classification is complete.

Rene Leclerc Status Report

Historical Geomorphology - looking at the area between the confluence of the Cosumnes with the Mokelumne to Highway 16. This portion of the study is not completely finished.

Northwest Hydraulics has split the river into 5 reaches based on river channel planform.

- Reach 1 - Confluence to Twin Cities Road
- Reach 2 - Twin Cities Road to 99
- Reach 3 - 99 to Wilton Road
- Reach 4 - Wilton to Rancho Murietta Airport
- Reach 5 - Rancho Murietta Airport to Highway 16

Historical river planform 1862-2002

- 1907-08 maps show many connectors that diverted flows from the main channel to the overflow channels during periods of high water.
- There is a large mapping gap between 1907 and 1953.
- Observation and estimates from 1937 aerial photographs can be made but no USGS mapping exists.
- Upstream the "general" alignment is about the same but this doesn't mean that it is insignificant to the landowners because 100-200 feet can make a huge difference.

Historical levee locations 1907-2002

- 1907-08 showed a generally increasing trend in levees until stabilized.
- Dillard to Wilton area first levees - agricultural land on the right-bank.
- 1979-80 map shows no levees downstream of Twin Cities Road.
- Stereoscopes of the 2002 aerial were used to compare with the 1979-80 map to see what has been built recently.

Historical invert profiles 1907-2001

- Maps used: 1907, 1953 USGS, 1957 Corps, 1966-67 USGS, 1972 Caltrans bridge surveys, 1996 PWA, 1998 USGS, and 2001 Constantine.

Historical timeline

- 1972 was possibly a very active time of erosion.
- Caltrans maps show around 3-4 feet incision at two point bars, a good distance from the other, which gives the idea that the rest of the river did the same also incised 3-4 feet.
- Large time without major floods ~1910-1950.
- Many small sloughs were historically abundant between the Cosumnes River and Deer Creek from Wilton Road to 99.

Preliminary Observations

The lower Cosumnes River has been increasingly confined by land use changes over time

- loss of sloughs and distributary channels due to land reclamation, mainly in lower half of project area
- flows are concentrated in the main channel by levees, bridges, and other encroachments

Significant channel incision has occurred on the lower Cosumnes River

- between 7 ft and 16 ft of incision has occurred since 1907-8
- survey data show that the majority of channel incision occurred between 1957 and 1972
- channel incision is now either proceeding at a very slow rate or has stopped entirely

Historical planform changes have been greater in the lower half of the project area

- several distributary channels, small lakes and marshes were reclaimed for farmland downstream of Highway 99 from 1907-8 and 1953
- small sloughs between the Cosumnes River and Deer Creek were historically abundant from Wilton Road to Highway 99
- the general alignment of the Cosumnes River from Highway 16 to Wilton Road has remained relatively constant for the last 100 years, aside from some areas of bank erosion and minor channel shifting

There are multiple causes of historic changes in river geomorphology

- Key historic changes that have affected channel morphology include land reclamation, levee, bridge, and dam construction, changes in basin land use, groundwater usage, and hydraulic mining.
- It is important to realize that channel adjustment on the lower Cosumnes River is a response to both local changes (e.g. levees and bridges) as well as basin-scale changes that affect hydrology and sediment yield.

Concern - Snow pack

Some concern has been raised that snow pack and rain need to be included in the overall report. In 1986 and 1997 the Cosumnes River Watershed had good snow pack and then warm rains came and it flooded. In 1993 the Cosumnes River Watershed had record rains but it didn't flood in the Cosumnes River because there wasn't a large snow pack and the rains weren't warm.

3. Project Progress Update

- **Stream Gages – Craig Crouch**

DWR has received a bid for the installation of the gages. Contracting and in-kind match will take a couple of months but it looks like early spring for the kick-off gage party.

Sacramento County has a couple of flood gages (Automated Local Evaluation in Real Time (Alert System) on the Cosumnes and Deer Creek (see <http://www.sacflood.org> for more information).

- **Army Corps Project**

Still waiting on a lead but pressure is being put on from all sides to get this project going.

- **Southeast Sacramento County Agricultural Water Authority (Authority), Larry Rodriguez**

The Authority completed their Groundwater Management Plan in December. The plan is a stepping stone to develop a more comprehensive plan. The Authorities objective is groundwater recharge for agriculture and environmental uses. Due to time constraints Larry will present information on the Groundwater Management Plan at the next meeting.

- **Schneider Project**

This subject will be tabled until the next meeting when Don Nottoli is able to attend.

4. Zone 40 Water Supply Master Plan

It was decided that although it is not the place of the CRTF to comment on these types of documents, it is still important to discuss them at the meetings and then let individuals decide if they would like to comment. Craig will see if someone is available to present the project to the group.

5. Newsletter / Up & Coming Meetings

- Gages ceremony with a hosted lunch.
- UC Davis groundwater monitoring
- DWR monitoring wells

Adjourn - Next Meeting will held February 11, 2003.