Technical Advisory Committee (TAC) meeting notes - May 4, 2010

Vice Chair: Denise Rist

Denise opened the meeting with self introductions. The following were in attendance: Mary Fahey, Gregg Werner, Lady Bug Doherty, Michael Rogner, John Merz, Mary Randall, Laura Westrup, Susan Strachan, Rachel Hutchinson, Tom McCubbins, Rebecca Funes, Henry Lomeli, Diane Coulon, Josh Brown, Sean Sou, Buford Holt, Margie Graham, Rob Irwin and Ellen Gentry.

Announcements

Mary Randall, DWR, reported the Valley Wide Forum will be held in Stockton at the Agricultural Center, June 3, at 1:00PM. Panel discussions will be held. More information will follow. (The location was changed to the Bridgeway Lakes Boathouse in West Sacramento after this meeting.)

Henry Lomeli asked about the wire fencing used to protect vegetation at RM182. The vegetation has grown in, birds are now being trapped and the purpose of the fence is no longer needed. He has asked to have the fence removed. Mary will relay information to the appropriate person.

John Merz, Sacramento River Preservation Trust, reported on the upcoming Sutter Buttes "Cathedral Peak" Hike, May 15, 8:30AM to 4PM. The hike will be guided by Daniel Barth of the Yuba Historical Society. A Sacramento River float trip from Jelly's Ferry to Bend Reach is planned for May 16. The moonlight float has been rescheduled.

To celebrate the Capay Unit formal opening and International Migratory Bird Day a guided bird walk will be held May 22, 8-10:00AM. For more information contact the US Fish and Wildlife Service at 934-2801, or Kelly Moroney at kelly moroney@fws.gov.

Activity Reports

Lady Bug asked about the USACE Levee Vegetation Policy, the potential loss of riparian vegetation along levees within the SRCA, and the variance request process. Studies have not been completed on the effects of vegetation on levees. She suggested the Forum send a letter to USACE, and will send information to Beverley Anderson regarding rules and regulations. Mary reported that DWR and DFG sent a joint letter to USACE. Gregg Werner noted the policy would allow vegetation on the lower two-thirds of the water side of the levee slope. The vegetation on the upper third of the water side and all of the landside would be removed.

He added that the impression has been that north of Colusa most levees are clear, south of Colusa there are more problems. Lady Bug added that some roots have gone through slurry walls. An environmental review is still needed.

Margie Graham, DWR, brought up two projects within the SRCA; 1) a 267 unit housing development in Colusa (River Bank Project) with plans of building adjacent to the levee, and 2) the Natural Gas Storage at Princeton (http://www.cpuc.ca.gov/environment/info/dudek/cvgs/CVGS HOME.htm;) asking if these would affect or conflict with the conservation area. She offered to send specific information and suggested a speaker come to the TAC to review the projects.

New Projects or Proposal Review

There were no new projects at this time.

Current Projects/Updates

There were no project updates at this time.

Role of Map Validation in Riverscape Ecology (SRMAP)

Rachal Hutchinson, UC Davis gave a PowerPoint presentation on Accuracy Assessment, Cross Walk, Change Detection, and Identifying Errors with Environmental Data for vegetation mapping for the SRMA Project.

Researchers visited approximately 10% of each vegetation type in areas not well represented by existing map units or defined vegetation classes. At each site, the researchers utilized rapid assessment to visually determine overstory species dominance within polygons loaded into field-based GPS units. The original GIC map (vegetation polygon) was edited to contain updated vegetation types. This produced a second vegetation dataset, which was evaluated for interpreter consistency and inter-rater reliability.

The accuracy assessment compared the GIC dataset and UC Davis dataset, and found that the GIC dataset had an overall accuracy of 85.3%. Approximately 3,300 hectares were re-digitized to reflect the field-validation.

A Cross Walk association was shown between the 1999 and 2007 maps showing percent stasis in one-to-one and one-to-many relationships. One issue was the 1999 and 2007 maps did not use the same vegetation types and most categories were not directly comparable, resulting in cartographic imprecision.

The basic principle of Change Detection is vegetation types with decreasing proportionality over increasing distance have less spatial constancy and are more prone to cartographic error and therefore have, or will have a lower detectability. Since the 1999 and 2007 vegetation maps did not use the same vegetation types, most categories were not directly comparable.

Some recommendations included collapsing Valley Oak and Sycamore polygons, collapsing floating lea and Ludwigia polygons, quality control aerial photos before polygon delineation, and use multispectral imagery to enhance remote sending techniques. Evaluating map error and environmental variables included the possibility of errors of habitat complexity. Using discriminate analysis, preliminary results indicate that older and higher floodplains are more likely to have more attribute errors.

Coordinated efforts with CSU Chico will be available at the next TAC meeting. Results are available at: http://baydelta.ucdavis.edu/srmap/.

Hamilton City Flood Damage Reduction and Ecosystem Restoration Project

Gregg Werner (TNC) Project Manager, gave a PowerPoint presentation outlining the history of the Hamilton city project and giving an update on current status. Hamilton City is within the Sacramento River floodplain with approximately 10 year flood protection. The current J-levee was built circa 1904 and has multiple levee owners and no public maintenance program. Evacuations have been ordered six times in 25 years. A new levee for protection of Hamilton City did not meet USACE Benefit/Cost Ratio standards as a stand-alone flood project.

The Sacramento-San Joaquin Comprehensive Study identified a combined flood and ecosystem project. Local community and farming interests engaged TNC, SRCAF, and other partners to help. Initial funding was secured from CalFed, WCB, DWR, and the federal budget. A local tax was passed and extended to help fund planning and future levee maintenance.

The flooding solution incorporated a new 6.8 mile long levee, setting the levee back from the river to provide enough room to accommodate floodwater displaced by the higher levee, and restoring the land between the setback levee and the river to riparian habitat. This combination of flood damage reduction and ecosystem restoration benefits gave a positive Benefit/Cost Ratio.

Project benefits include greatly increased flood protection for Hamilton City and surrounding farm land, no increase in flood levels across the river, 1,400+ac of restored riparian habitat and connecting 4,000ac of riparian habitat.

The question of rock removal to restore ecosystem function and for potential bank swallow habitat was raised. Gregg noted the project is balanced for cost to benefit, assuming no rock removal, however there are locations in the bank protection that are starting to fail.

It was asked if a final decision has been made on fence design. Local landowners were adamant about a fence to assist with limiting depredation from wildlife and trespass. The USACE altered the design to change from chain link to hog wire (allowing for small animal movement), lower the fence from 8' to 6', and locate it on the landside of the levee with a 15' access area at the base of the levee. There will 18 locations where there will be openings in the levee with flap gates for drainage when the river is not flooding. This new design reduced the project cost by approximately \$750,000.

The key to moving the project to construction phase is federal funding which is being promoted and lobbied. Federal construction funding was not included in the administration's FY11 budget. The focus is now on funding in the FY12 budget, with a potential construction start date of 2012.

TNC is donating approximately 1300ac of property at no cost for this project. Gregg said the longstanding policy is that if TNC acquires land with government funds they don't turn around and resell it and regain those funds. Funds are not recouped because the land was purchased with public funds.

Management Planning for the Colusa Basin Watershed

Mary Fahey, Colusa County RCD (CCRCD), gave a PowerPoint presentation outlining the Watershed Management Plan. The purpose of the plan is to address the issues and concerns of stakeholders within the watershed, establishing goals and actions to sustain and enhance watershed functions. The living document will also provide ongoing education on the importance of a healthy watershed ecosystem. Watershed issues follow natural ecosystem boundaries and represent a wide variety of natural resources. Watershed stewardship is a shared responsibility for the health and well being of the land and water resources within its boundary.

Collaboration involves a variety of agencies, organizations, and landowners and addresses multiple issues such as water quality, land use, ecosystem restoration, and economic uses. The emphasis is on the entire ecosystem within the watershed.

The Colusa Basin Watershed funnels precipitation to the Sacramento River, via the Colusa Basin Drain and covers 1,634square miles, spanning portions of Glenn, Colusa, and Yolo Counties. It is mainly rural, dominated by agricultural and rangeland activities. The average annual precipitation ranges from 17 to 27in.

The highest ranked issues of concern were identified by stakeholders in the assessment: water quality, water availability, preservation of ag land, invasive species, flooding, riparian habitat and wildlife habitat.

It was asked how water quality became the highest ranked issue. Buford Holt, US Department of the Interior noted that when diversions were cut back at GCID, water in drains became poorer. When additional drainwater was released, salinity became an issue in lower watersheds. Mary added that these issues were chosen from suggested topics.

It was asked if CCRCD is integrating with other RCDs. Mary reported that Yolo and Glenn County are involved with the watershed assessment.

Denise Rist explained that although CCRCD was not familiar with the Colusa Subreach Planning Project, those studies are complete and information is available through the Forum and on the SRCAF website.

Next steps include compiling stakeholder feedback, drafting an outline structure for the Plan, conducting additional work group and TAC meetings, and designing an implementation program. For more information contact Mary, Watershed Coordinator, CCRCD, (530) 458-2931x117 or go to www.colusarcd.org.

Overview and Status of North-of-the-Delta Offstream Storage Planning

Sean Sou, DWR Project Manager, gave a PowerPoint presentation. Primary objectives include; 1) increase water supply, water supply reliability, and Sacramento Valley water management flexibility, 2) improve Delta water quality, and 3) increase the survival of anadromous fish populations in the Sacramento River, as well as the health and survivability of other aquatic species. Secondary objectives were to provide ancillary hydropower generation, additional recreational opportunities and incremental flood damage reduction benefits.

Potential conveyance facilities include the Tehama Colusa Canal, the Glenn-Colusa Irrigation District Canal, and a new pipeline from the Sacramento River to Sites reservoir. The capacity of the Sites reservoir is 1.8 million ac ft and it will cover 14,000 acres. The maximum pumping lift from the Sacramento River to Funks reservoir is 165ft with additional lift from Funks reservoir to Sites reservoir of 320ft. The total diversion capacity is 4,000-6,000cfs. Intake will be able to fill Sites reservoir from the river, or release into the river with the two way pipeline.

Completed activities include field studies, the initial Alternatives Information Report, the Plan Formulation Report, 80% of the Feasibility Level Design, and 50% of the EIS/EIR. The final feasibility report and EIS/EIR are expected to be complete by the end of 2012. The 2009 funding freeze and changing legal, regulatory, and environmental conditions have impacted planning and may require reformulation of project alternatives and operations.

The 2009 Comprehensive Water Package passed on November 4, 2009 includes SB2 – Safe, Clean and Reliable Drinking Water Supply Act of 2010, which would provide for this project. Current funding comes from Prop 84.

Next steps: continue and complete technical studies, refine alternative plans, evaluate and compare potential effects of alternative plans, refine design/cost/benefit estimates, determine feasibility and implementation responsibilities, and complete feasibility study and environmental documentation.

Sean asked for information from the group. Suggestions included analyzing impacts and fishery concerns if fish are present. Sean offered to make a presentation to the SRCAF Board. He can be reached at (916) 651-9269, sou@water.ca.gov.

Next Meeting Date and Location

The next meeting was scheduled for Tuesday, June 1, at Willows City Hall. Since this date follows the Memorial Day holiday, it will be rescheduled for June 8.