Lower Yolo Bypass Planning Forum
Planning Forum Meeting #4

DRAFT FINAL MEETING SUMMARY

MEETING DATE: October 20th, 2008

LOCATION: Davis Police Department
2600 5th St
Davis, CA

ATTENDEES:

Planning Forum Members and Co-Sponsors
Kathy Barnes-Jones, Solano County
Joel Buettner, Sacramento Yolo Mosquito and Vector Control District (SYMVCD)
Brad Burkholder, Department of Fish and Game (DFG)
Amy Cameron, Port of Sacramento
Rose Conroy, Davis Fire Department
Gilbert Cosio, MBK Engineers
Dave Feliz, DFG Yolo Bypass Wildlife Area
Linda Fiack, Delta Protection Commission (DPC)
Neil Hamilton, Reclamation District (RD) 501
Mike Hardesty, RD 2068/2098
Gilbert Cosio, MBK Engineers / RD 536
Butch Hodgkins, Central Valley Flood Protection Board (CVFPB)
Jack Kuechler, RD 2060
Robin Kulakow, Yolo Basin Foundation (Foundation)
Barbara McDonnell, Department of Water Resources (DWR)
Julia McIver, Yolo County
Selby Mohr, Mound Farms
David Okita, Solano County Water Agency (SCWA)
Jason Peltier, Westlands Water District
Tom Philp, Metropolitan Water District (MWD)
Melinda Terry, North Delta Water Agency (NDWA)
Jan Vick, City of Rio Vista
Erik Vink, Trust for Public Land (TPL)
Bob Webber, RD 999
Maria Wong, Yolo Natural Heritage Program (Yolo JPA)

Staff
Dave Ceppos, Center for Collaborative Policy (CCP)
Sam Magill, CCP

Interested Public
Steve Bradley, DWR
Cliff Covey, Solano County Resources Management
Joel Dudas, DWR
Steve Greco, UC Davis
Mitsuko Grube, DFG
Patrick Huber, UC Davis
Roger Lee, DWR
John McNerney, City of Davis
Jessica Olson, Solano Land Trust
Bob Schneider, Tuleyome
Andrea Turk, DWR
Chris Unkl, Ducks Unlimited
Jeanette Wrysinski, Yolo Resources Conservation District
Greg Yarris, California Waterfowl Association

KEY DECISIONS

1. Planning Forum members approved the October 7th Meeting Summary.

ACTION ITEMS

1. CCP will work with David Okita and Kathy Barnes-Jones to obtain copies of the 2008 Solano County LiDAR data (**note: the data is not compiled at this time**).

2. CCP will work with Bay Delta Conservation Plan (BDCP) staff to determine where their restoration acreage targets and the recommendation to lower the Fremont Weir came from.

3. CCP will develop a strategy to convene an "Objectives Development Subgroup" in advance of next planning steps after the first of the year

4. DFG and CCP will work to distribute bathymetric data for the open water segment of Liberty Island to the Planning Forum as it becomes available.

5. Andrea Turk and Marianne Kirkland will deliver a presentation on river stage and inundation periods in the Lower Bypass (as determined in the CALFED grant project) at the November 6th meeting.

6. CCP will post the most recent maps of 100 and 200 year floodplains in the Central Valley to the website.

Introductions and Announcements

Dave Ceppos opened the meeting and provided a brief background on the Lower Yolo Bypass (Lower Bypass) Planning Forum (Forum) and CCP. All documents referenced below are available on the Forum project website at www.yolobypass.net.

Mr. Ceppos gave updates and allowed Forum members to make announcements. CCP is working to develop presentations for the remainder of the "education phase." Due to scheduling conflicts, future education presentations have been revised to allow key presenters to attend. Additionally, the October 7th meeting on Hastings Island created a number of new education topics for discussion by the Forum. CCP anticipates that some items are "foundational" for the overall Forum process and others can be addressed on an "as needed" basis when a topic gets raised. In the coming weeks, the Forum will transition away from flood management topics and begin talking about habitat and agricultural issues in the Lower Bypass.

Mr. Ceppos explained that efforts are ongoing to fully integrate the Planning Forum into the BDCP process. CCP hopes to include presentations on the Biological Opinions (BO) for the Operating Criteria and Plan (OCAP) on the State Water Project/Central Valley Project (SWP/CVP) at the December 9th meeting. The BO is expected to have significant effects in the

Yolo Bypass as a whole, and BDCP has identified conservation and habitat measures that directly affect lands within the Lower Bypass.

Mr. Ceppos commented that he recently met with Laura King Moon, BDCP, to discuss integrating the Forum into that process. Ms. King-Moon acknowledged the potential benefit to work with the Forum on Lower Bypass issues. Melinda Terry added that the Forum appears in the new draft conservation measures for the BDCP, and specific measures affecting the Lower Bypass appear on page 27 of the BDCP *Habitat Restoration Conservation Measures.* Ms. Terry also announced that the North Delta Water Agency has been approved to be a member of the BDCP Steering Committee. Ms. King Moon will attend the November 6th meeting.

Other Announcements:

- Linda Fiack announced that the Delta Vision Blue Ribbon Task Force formally approved the Delta Vision Strategic Plan on October 17th.
- Jason Peltier announced that the 5th Biennial CALFED Science Conference takes place Wednesday, October 22nd through Friday, October 24th.
- Dave Ceppos announced that the Yolo Bypass Working Group (YBWG) held its 43rd meeting on October 14th. Mr. Peltier led a productive discussion on BDCP at that time. Other topics for discussion included vector control issues in the Yolo Bypass and management of the DFG Yolo Bypass Wildlife Area.
- Mr. Ceppos and Ms. Kulakow announced the November 12, 2008 meeting sponsored by the USGS and Yolo Basin Foundation regarding methylmercury conditions in the Yolo Bypass.
- Mr. Ceppos announced that the Central Valley Regional Water Quality Control Board is convening a stakeholder advisory group to support the Delta methylmurcury Total Maximum Daily Load (TMDL) and that CC is supporting this effort

After announcements, Mr. Ceppos let participants introduce themselves and he provided a review of the agenda. Comments periods would be provided after each presentation for Forum members and members of the general public.

Finally, the October 7th meeting summary was adopted as final (**see Key Decision #1**).

Presentation: Topographic Data

Joel Dudas, DWR, delivered a presentation on the use of Light Detection and Ranging (LiDAR) data in the Lower Bypass. This presentation is available at www.yolobypass.net under "Meeting #4."

The presentation covered a range of topics, including an introduction to LiDAR mapping, limitations of LiDAR, and a review of the maps generated using the 2005 and 2007 LiDAR flights. LiDAR is developed by synchronizing an aircraft's position with Global Positioning System technology and "bouncing" a laser from the plane to the ground. The length of time it takes for the laser to return to the plane can be calculated to determine the exact elevation of the ground below within 6 inches.

There are a number of limitations to LiDAR data. In the Lower Bypass, readings from vegetation and water bodies can cause false readings. As the laser hits vegetation, it is reflected back to the plane before hitting the ground. While this can generally be compensated for by reading only the last return from the ground to the plane, heavily vegetated areas such as Prospect Island can be difficult to penetrate. Alternative measures such as on-the-ground site surveys are necessary in these areas. Additionally, the infrared lasers used for LiDAR are cancelled out when they hit water, so returns from water are inaccurate because they can be the result of a range of conditions such as turbidity, objects in the water, etc. The quality of the laser scanner and altitude/speed of the plane can also affect the quality of the data.

The 2005 LiDAR flight, commissioned by DWR, covered the entire Yolo Bypass. Due to technological limitations and issues with the flight path, the 2005 data did not fit within the predetermined specifications set by DWR. Additionally, readings from water surfaces were not removed from the data set, giving false readings in a number of places.

In 2007, the entire Delta was reflown, including the Lower Bypass. This data was significantly more accurate and falls within the 6 inch accuracy specifications. Problems were discovered with approximately 10% of the flight and are currently being reflown.

Discussion:

- Steve Grecco asked how far the 2007 data extends beyond the 2005 data. Mr. Dudas responded that it roughly coincides with the railroad trestle to the west of the Bypass.
- Mr. Ceppos asked if there are any implications for the Planning arising from the differences between the North American Vertical Datum 1988 (NAVD88) and the National Geodetic Vertical Datum (NGVD). Gilbert Cosio responded that the difference can be roughly accounted for by subtracting 2.5 feet from the NAVD88 data.
- Ms. Fiack asked if the current Federal Emergency Management Agency (FEMA) flood mapping process affects or feeds into the LiDAR data. Julia McIver responded that the FEMA maps are much less accurate then the LiDAR maps. Mr. Ceppos suggested that the two map sets are used for very different purposes: FEMA rounds their figures up to determine flood risk. LiDAR can be used for land use changes such as habitat restoration, which require a much higher degree of accuracy.
- David Okita noted that Solano County did its own LiDAR flight in 2008. CCP will work with Mr. Okita and Kathy Barnes Jones to determine the availability for and applicability of the data to the Planning Forum's work (**see Action Item #1**).
- Mr. Ceppos noted that Prospect Island and parts of Liberty have developed good habitat through "benign neglect," and asked if LiDAR data can be used to compare the topography of these areas to other areas to determine where additional restoration might take place. "Habitat" in this sense means combined habitat values and goes beyond habitat for aquatic species only. Barbara McDonnell responded that ideal tidal habitat falls within 2-4 feet of the mean sea level. The LiDAR data shows a crescent shaped swath of land around the "wetted edge" of the Lower Bypass.
- Mr. Peltier remarked that the idea of this crescent shaped swath could be misleading and of concern to regional stakeholders, since Clarksburg falls within this area. This could give the impression that the Forum or other groups intend to flood the area for habitat purposes.

- Mr. Okita said that the publicly owned lands in the Lower Bypass are planned to be converted to habitat or already are. Other lands for potential conversion include Little Egbert Tract and the Cache/Lindsay Slough Complex. For lands protected by project levees, the expense of breaching and relocating Sacramento River Flood Control Project (FCP) levees needs to be considered.. Mr. Cosio added that if this idea is entertained, it could require an act of Congress to modify the system.
- Mr. Cosio stated that the LiDAR maps show that topography on the western edge of the Lower Yolo Bypass is fairly steep in places. Generally flat conditions rapidly rise as they extend to the west (including near the Cache / Lindsay Slough Complex). Taking into account sea level rise estimates, this pushes water farther and farther up the "slope." If restoration is done now, future sea level rise by 4 feet will wipe out most habitat projects in the area.
- Planning Forum Members noted that recent, initial BDCP conservation measures include some acreage targets for restoration actions, and suggest creating a notch in the Fremont Weir to spill at 17 feet and allow localized flooding in the Bypass. Several of these Members asked where these ideas came from. This item was identified for further investigation by CCP and Forum members (**see Action Item #2**).
- Mr. Ceppos noted that the Forum will need to use data like LiDAR and on-the-ground knowledge to determine whether BDCP and other strategic plans make sense as they near the implementation phase.
- Ms. McDonnell suggested establishing a set of group assumptions such as "no recommendation will require an act of Congress." Mr. Ceppos responded that as the Forum moves into the planning phase, this will be necessary. Each representative group in the Forum will have to define a set of objectives and corresponding metrics to gauge recommendations as they arise.
- Maria Wong commented that it will be useful to develop an opportunities and constraints analysis based on physical conditions within the Bypass.
- Ms. Fiack commented that in the DPC Land Use and Resource Management Strategy, the Commissioners found that it was more helpful to look at shared land characteristics for management objectives rather than actual areas. From a facilitation standpoint, DPC feels that the Forum has developed a high degree of comfort between the various members: "mapping out" anything should only be done with the caveat that it is for discussion purposes only, and not for planning measures.
- Mr. Ceppos remarked that it could be useful to put together a subgroup of Forum members to begin thinking about how to dedine group objectives and/or some form of guiding principles to structure future planning discussions. CCP will develop a strategy to assemble this group and discuss it at the November 6th meeting (**see Action Item #3**).
- Jack Kuechler noted that the 2007 LiDAR data would be more useful with detailed bathymetric data of the open water segment of Liberty Island and Little Holland Tract. Brad Burkholder commented that DFG is developing this information for Liberty Island. DFG and CCP will distribute this information to the Forum when it is released (**see Action Item #4**). This data should be available in December.
- Tom Philp suggested that it could be ineffective to focus on acreage numbers at this point in the Forum process since there are such varied opinions on this topic from a range of specialists and affected stakeholders; few if any of these opinions are conclusive.

- Ms. McIver noted that Delta Vision talks about initial habitat conversion and a "reserve zone" on the periphery to accommodate sea level rise.
- Ms. Kulakow noted that land management within the Bypass is based on the river stage at the Fremont and Sacramento Weirs and the conditions under which the Bypass floods. She further questioned what is known about how the combination of tides, flood flows down the lower Sacramento River in the Delta, and flows spilling at Fremont Weir regarding how the Lower Bypass gets inundated and effected.. She suggested that this data could be useful for planning strategies in the Lower Bypass. Mr. Grecco added that thorough hydrodynamic modeling of the area, coupled with pictures of actual events, would also be helpful. Andrea Turk and Marianne Kirkland, DWR, offered to deliver a presentation on the work done with CALFED that speaks to these issues (**see Action Item #5**).

Presentation: Current and Recent Legislation

Mike Hardesty delivered a presentation on legislation affecting the Lower Bypass. Steve Bradley assisted in the explanation of SB 5 (Machado) and the Central Valley Flood Protection Plan (CVFPP). This presentation is available online at www.yolobypass.net under "Meeting #4."

The legislation discussed included (in order) SB 5 (Machado), AB 5 (Wolk), SB 17 (Florez), AB 156, (Laird), AB 162 (Wolk), and SB XX1 (Perata). Mr. Hardesty explained that, with the exception of SB XX1, the other bills were part of a flood package: for any of the bills to pass, all of them had to pass.

Mr. Bradley explained that the State Plan of Flood Control (SPFC) mentioned in the above legislation refers to the existing conditions and facilities of the physical state flood control system, not a "plan" for flood management purposes. The SPFC refers to the system as it is now, whereas the CVFPP required by SB 5 maps out the way the system *should be*. The CVFPP will also define exactly what the state and federal flood systems actually consist of. Mr. Hardesty added that SB 5 also defines what an urban area, urbanizing, and urban level of flood protection are. To illustrate these ideas more clearly, CCP will post the most recent maps of the 100 and 200 year floodplains on the website in the document archive (**see Action Item #6**).

Discussion:

- Ms. Terry asked if the CVFPP will make physical recommendations for the system such as the lowering of the Fremont Weir. Mr. Bradley responded that is unlikely to be that detailed, given the short timeframe available.
- Ms. Terry asked how the CVFPP and BDCP will integrate. Mr. Bradley noted that BDCP will have to feed into the CVFPP, not the other way around.
- Ms. Fiack asked if bond funding will be available to local jurisdictions to meet the requirements in SB 5. Mr. Bradley stated that he believes this will be the case.
- Mr. Hardesty noted that most areas in the Central Valley have struggled to get 100 year flood protection; the requirement to get 200 year protection will be very difficult for some areas to meet. It could also present significant constraints to the Forum, as 200 year flood protection will require a significant increase in the flood capacity of the Lower

Bypass. Mr. Bradley remarked that it is his hope that the Forum can begin some of the initial collaborative planning on this issue.

- Mr. Ceppos reminded the Forum that changes to the Bypass are not written into the requirement for 200 year protection in SB 5. While the Bypass is a significant part of the FCP, it is not the *only* component of the system. Mr. Bradley confirmed this. He stated that the Forum and groups like the Sacramento Valley Flood Action Work Group should be tapped as the correct stakeholder resources to plan which actions will take place in the Bypass.
- Selby Mohr commented that the expansion of the Folsom spillway and expansion of the reservoir will also have implications for the Lower Bypass and should be examined by the Forum.

Mr. Hardesty closed the presentation by discussing SB XX1. This bill links bond funding from a variety of sources to the Delta Vision Strategic Plan, and appropriates $820,973,000 for various water and levee improvement projects. $100 million is appropriated specifically to support the actions in the Delta Vision strategic plan, including levee repairs in the Delta. Ms. Terry remarked that the Governor initially appropriate $50 million in the FY ’08 budget for water improvements; this bill overrides that provision.