

**YOLO BYPASS MANAGEMENT STRATEGY
STAKEHOLDERS WORKING GROUP MEETING NO. 5**

***DRAFT*
MEETING MINUTES**

MEETING DATE: March 9, 2000

LOCATION: California Department of Fish and Game
Yolo Wildlife Area Headquarters
45211 County Road 32B (Chiles Road)
Davis, CA 95616

IN ATTENDANCE: Randy Baxter, California Department of Fish and Game (DFG)
Robert Brown, Bull Sprig Outing Duck Club
Walt Cheechov, U.S. Department of Agriculture (USDA), National
Resources Conservation Services (NRCS)
Chuck Dudley, Joe Heidrick Enterprises
Mike Egan, Yolo Flyway Farms
Denny Eickmeyer, L. G. Duck Club and Yolo Wings Group Rep.
Chris Fulster Jr., Glide-In Ranch
Richard Hadley, U.S. Fish and Wildlife Service (USFWS)
Mike Hardesty, Reclamation District 2068
Bill Harrell, California Department of Water Resources (DWR)
Tom Harvey, USFWS
Craig Isola, Sacramento National Wildlife Refuge
Arline Jones, Lucky 5 Farms
Elmer Jones, Lucky 5 Farms
Greg Kassis, Glide In Ranch
Dennis Kilkenny, Dawson Duck Club
Yvonne LeMaitre, Glide Ranch Trustee
Bob Leonard, Yolo Basin Farms
Rick Martinez, Martinez Farming Co.
Duncan McCormack III, Yolo Ranch
Duncan McCormack IV, Yolo Ranch
Larry Minshall, Yolo Flyway Farms
Gary Moody, Yolo Wings
Scott Morgan, W. T. Morgan Real Estate Co.
Dennis Murphy, Murphy Farms
Ricardo Pineda, State Reclamation Board
Lynn Pryor, Yolo Links
Gordon Rasmussen, Rasmussen Ranch

Ross Rasmussen, Rancher
Chad Santerre, California Waterfowl Association (CWA)
Greg Schmid, Los Rios Farms
Peter Schmidt, Ducks Unlimited
Ted Sommer, DWR and University of California, Davis (UCD)
Ron Tadlock, Ron Tadlock Farms
Ray Thompson, Sky Rakers Duck Club
Ed Towne, Bull Sprig Outing Duck Club
James Waller, Senator Outing
Robin Kulakow, Yolo Basin Foundation (YBF)
Dave Ceppos, Jones & Stokes
Alice McKee, Jones & Stokes
Luke Rutten, Jones & Stokes
Warren Shaul, Jones & Stokes
Jennifer Stock, Jones & Stokes
Gus Yates, Jones & Stokes

NEXT MEETING: The next Working Group meeting will be held on Friday, April 14, 2000, from 10:30 a.m. to 1 p.m. at the DFG Yolo Wildlife Area Headquarters. Lunch will be provided. Members of the Working Group are asked to call Jennifer Stock at 916/739-3086 to confirm their attendance.

ACTION ITEMS

1. Jones & Stokes will conduct additional studies of hydrology within the Yolo Bypass (Bypass). These studies will include investigating the following issues:
 - # duration (in days) of flows over the Fremont Weir over a period of years;
 - # amount of flow that made the Fremont Weir spill this year versus the amount that made it spill 30 years ago (when the Sacramento River was being dredged);
 - # collection of hydrology data for the entire Bypass.
2. The project team will bring additional examples of the U.S. Army Corps of Engineers (Corps) cross sections through the Bypass to the next Working Group meeting.
3. Jones & Stokes and YBF will begin work on a proposal to the CALFED Bay-Delta Program (CALFED) for funding a process that would determine fair compensation for land use changes intended to benefit habitat. The draft proposal will be sent to Working Group members for review before the next Working Group meeting.

DECISIONS MADE

1. The Working Group approved the draft minutes from the February meeting. Those minutes will now be made final.
2. The group agreed to begin work on a CALFED proposal for funding a process that would determine fair compensation for land use changes intended to benefit habitat.

SUMMARY OF MEETING

Introduction

Ms. Kulakow began the meeting by welcoming the group and explaining that the purpose of the Working Group is to discuss current and possible future land use practices in the Bypass, based on the desires and willingness of landowners.

Mr. Ceppos reviewed the agenda and asked for changes or additions; there were none. He then asked for changes or additions to the February 10, 2000 meeting minutes; there were none. The February 10, 2000 meeting minutes were adopted as final.

Mr. Ceppos asked the attendees to introduce themselves.

Mr. Ceppos reminded the group that the purpose of the Working Group meetings was to provide brief updates on activities concerning the Bypass and to provide information about options for land use changes within the Bypass to the Working Group so they could make sound business decisions. He further explained that decisions made by the group will be included in the future Management Strategy document and that the Working Group forum is intended to be the voice of the stakeholders.

Mr. Ceppos added that the purpose of today's meeting was to continue to present landowners and water users with technical information that will aid them in making business decisions and to hear their concerns related to these technical issues. He stated that two questions raised by the Working Group at past meetings are whether flooding has been more frequent in the Bypass in recent years and what type of compensation could be available to landowners who agree to make changes in their practices to improve fish and wildlife habitat. He explained that today's meeting would begin to address these questions, and then he introduced Gus Yates, hydrologist, and Luke Rutten, geomorphologist, from Jones & Stokes.

Flooding and Other Hydrologic Issues

Mr. Yates and Mr. Rutten explained that they would be providing an initial overview of both flooded and low flow hydrology in the Bypass, based on preliminary research they had conducted. They asked for the group's input on their presentation, explaining that the information presented was intended as a starting point for discussion. They anticipated that the group would have many precise details to add to the information they had gathered because the landowners and water users are intimately familiar with the Bypass and its hydrology. Mr. Yates stated that he hoped the Working Group could provide additional information, particularly about low flow regimes, which is not in the official records. He went on to say that the goal of these hydrology studies is to help the group to understand the hydrology of the Bypass which will aid them with making business decisions.

Mr. Yates explained that he and Mr. Rutten had begun researching flood flow regimes and lower flows within the Bypass. They had started by looking at existing information from existing gages.

Mr. Yates then presented several figures and graphs that presented data related to hydrology within the Bypass. Several of the figures, including one distributed at the February Working Group meeting, present gage data at the Lisbon Weir. The group expressed confusion over the maximum stage level at the Lisbon Weir presented in the figures. Mr. Yates explained that two datums are used in the figures. The figure distributed at the February meeting uses the Corps datum, which is 3 feet below sea level. The other charts and handouts use sea level as the datum, so there is a 3-foot discrepancy between the datums. Mr. Yates explained that the sea level datum was used to make the information more understandable to the group.

The group explained that they are accustomed to using the Corps datum and use the Corps stage reading at the Lisbon Weir as a yardstick for understanding changes in hydrology within the Toe Drain. Mr. Yates reiterated that the intent was simply to make the information as clear as possible

for the Working Group and stated that, this being the case, he and Mr. Rutten would use the Corps datum instead of sea level in the future. In the meantime, Mr. Yates asked the group to add 3 feet to the stages shown on all of the charts handed out, to correlate the elevations with the Corps Lisbon Weir datum that they are familiar with using.

Mr. Rutten explained that the main water sources contributing to flows in the Bypass included the Fremont Weir, the Sacramento Weir, the Knight's Landing Ridge Cut, Putah Creek, and Cache Creek. He added that Mr. Yates and he had studied existing data collected at the Lisbon Weir to determine if one of these sources was the major contributor to flooding in the Bypass. They found that the flows over the Fremont Weir were by far the largest contributor to flooding at the Lisbon Weir, while flows over the Sacramento Weir were minor in comparison. Flows from Cache Creek also appear to have some effect on flooding at the Lisbon Weir. He added that the construction of Berryessa Dam had changed Putah Creek's hydrology substantially so that Putah Creek now has much less influence on flooding in the Bypass than it once did. Mr. Yates also stated that the influence of Cache Creek correlated with general flooding in the region. To investigate whether this fact simply means that wet years are wet or if there has been a change in flooding possibly resulting from a change in management, he looked at data charting unimpaired runoff in the Sacramento Valley (natural runoff for the whole valley) and compared this data with the chart that shows flooding at the Lisbon Weir. He found that the 1990s were wet years throughout the Sacramento Valley, and the increase in flooding in the Bypass during these years correlated with the increase in runoff throughout the region. This finding implies that the recent increase in flooding in the Bypass is a result of wet weather patterns, not of changes to the operation of the weirs.

Mr. Pineda pointed out that the only reoperation of a weir in the area occurred at Folsom Dam, and this reoperation causes Folsom Reservoir to hold back more water, which would lead to less flooding in the Bypass. He added that it is important to note that standard operation of weirs and dams is done within a range of parameters, so that some fluctuation could occur but would not be considered a change in operations.

Mr. Yates presented graphs which showed daily stage data for the Lisbon gage and flow data for Cache Creek during water years 1985 and 1988. He explained that jumps in the Lisbon gage stage corresponded well with high peaks in Cache Creek. He also stated that these years were relatively dry and therefore the high stages at Lisbon were likely not influenced by Fremont Weir inflow. He then showed a graph correlating peak flow in Cache Creek to increases in stage at Lisbon Weir. This graph showed flows between 0–4000 cubic feet per second (cfs) causing stage increases of 0–4 feet and flows between 9000–12000 cfs causing stages increases of 9–13 feet.

Mr. Tadlock questioned the ability of Cache Creek to increase the Lisbon Weir gage 10 feet on its own. He said that other sources, such as the Knights Landing Ridge Cut, must also have been contributing flows.

Mr. Yates agreed with this point.

Mr. Yates then asked if there were questions about flood hydrology.

Mr. Dudley stated that he would like to see data regarding the duration (in days) of flows over the Fremont Weir, over a period of years. He asked if the same amount of flow that makes the Fremont Weir spill this year would have made the Weir spill thirty years ago (when the Sacramento River was being dredged).

Mr. Yates responded that he did not know the answer to this question, but the issue could be studied through this project.

Mr. Dudley added that the data presented at today's meeting was based on flooding at the Lisbon Weir, whereas he would like to see data for the upper end of the system.

Mr. Yates explained the data presented today was based on existing gages, primarily the gage at the Lisbon Weir, and the hydrologic studies for the project were just beginning. He added that he intends to study the hydrology of the entire Bypass, not just the lower end.

Mr. Ceppos reminded the group that today's presentation is just the beginning of studies and presentations regarding hydrology issues. He stated that the project team would like to get feedback from the Working Group as to additional areas of study that would be useful. He explained that one intent of the Management Strategy project is to gather information regarding both high and low flows within the Bypass that would be helpful to the Working Group members.

The group questioned the accuracy of a cross section that Mr. Yates had shown. This cross section shows a slight rise in topography to the west of the Toe Drain. The group stated that the Bypass slopes down from the Toe Drain, from East to West. Mr. Yates explained that this cross section has an exaggerated vertical scale of 20:1, resulting in a somewhat misleading graphic. He explained that there appears to be a very slight, localized high spot at this particular point, but that the cross section generally slopes downward from east to west. The group agreed that, while a few locations like this one were possible, the cross section is not representative of the vast majority of the Bypass. This cross section captures an area that is very unusual.

Mr. Sommers pointed out that this set of cross sections was taken every 1000 feet, so the cross sections do not capture all the variability along the Toe Drain. In addition, he added, the surveys for these cross sections were done from the air, so their accuracy is plus or minus one foot. He cautioned the group that this means that any one location on any one cross section should not be considered to be extremely accurate, but that as a set, the cross sections provide a useful initial understanding of topography within the Bypass.

Mr. Ceppos stated that the project team would bring additional examples of the cross sections to the next meeting.

Mr. Kassis asked who conducted the surveys used for the cross sections.

Mr. Yates explained that the Corps had hired Ayres Associates to conduct the surveys.

Mr. Kassis then asked Mr. Pineda about the effects of the repairs to the West Sacramento levees on flooding in the Bypass.

Mr. Yates stated that raising the West Sacramento levees should not increase flooding in the Bypass since the levees never overtopped before they were raised.

Mr. Pineda added that the levees were raised to provide protection for West Sacramento in rare extreme (greater than 100 year) flood events. He explained that an analysis had been conducted and found that the highest benefit-to-cost ratio resulted from raising the levees to provide West Sacramento with 400-year flood protection. He stated that the Corps studies conducted before the levees were raised showed no measurable significant hydrologic effects that would need to be mitigated for.

Mr. Kassis said that he agreed that protecting West Sacramento is important, but wondered if the landowners and duck club operators would be compensated if the newly raised levees result in increased flooding in the Bypass. He explained that additional flooding, particularly with higher stage levels, would require duck clubs to raise their club houses.

Mr. Pineda responded that any comments regarding raising the levees should have been submitted during the environmental review process that occurred before the project was authorized. He added that this review process is over, but that these concerns should still be addressed. Mr. Pineda also added that the Corps analysis of such projects is based on data collected in the first half of the 20th century, but that the region experienced much wetter years in the second half of that century. He suggested that the data used to evaluate projects should perhaps be reanalyzed.

Mr. Fulster asked how high the West Sacramento levees would be raised.

Mr. Pineda responded that the levees would be raised up to 5 ½ feet maximum for an approximately 5 mile reach. He added that the goal of the levee raising project was to overbuild the levees to provide adequate protection and compensate for issues such as seepage and wave action overtopping the levee.

Mr. Fulster then asked if a bike trail has been proposed to be built on top of the new levees.

Mr. Pineda stated that he is not aware of a plan to build a bike trail on the levees, but that the City of West Sacramento could be planning to build a trail. He stressed that the Reclamation Board is not advocating, nor opposing, building a bike trail on the levees.

Mr. McCormack III mentioned the levee reconstruction project that took place near Woodland in the early 1990s to protect Cache Creek. He said that the Bypass floods more often from Cache Creek's flows as a result of the project.

Mr. Pineda responded that the Cache Creek project involved upgrading the Cache Creek settling basin. He explained that the settling basin was designed to cause sediment to drop out of Cache Creek's flows before the water enters the Bypass. The basin is intended to preserve the flood capacity of the Bypass and the navigability of the Sacramento River. The basin was filled with sediment by the late 1980s, so the Corps analyzed how to increase its capacity. This analysis indicated that the levees around the basin should be raised and a new concrete weir that spilled into

the Bypass should be built. Mr. Pineda said that the levees around the settling basin were raised 15 feet. The work on the improvements to the basin is almost complete.

Mr. McCormack III asked if it was a coincidence that the Bypass had experienced increased flows from Cache Creek resulting in increased flooding after the settling basin levees were raised.

Mr. Pineda responded that the project did not increase or decrease water coming into the Bypass system and did not change flows in Cache Creek, except to slow those flows slightly before they enter the Bypass.

Mrs. Jones asked if there have been changes in the operation of the major reservoirs in recent years that might affect the Bypass.

Mr. Yates responded that there have not been changes to any of the reservoirs except Folsom, and those changes resulted in less flow since the reservoir now holds more water.

Mr. Tadlock asked if the new operations at Folsom Reservoir included releasing more water sooner during a flood event.

Mr. Pineda stated that this was not necessarily the case. He explained that projects were underway to strengthen levees along the American River and to enlarge the outlets at the Folsom Dam. The enlarged outlets would allow larger releases to be made earlier during flood events. He added that this change is currently being designed, but that the resulting releases would still conform to the current standard operation parameters for the reservoir.

Mr. Pineda continued, stating that the project was intended to fix problems and to strengthen the levee system. He added that there is currently no plan to expand the flood capacity of the Bypass, although the possibility of expanding its capacity is being studied as part of the Corps Comprehensive Study.

Mr. Yates asked if an increase in flood levels in the Bypass for a short time during storm events would affect current land uses.

The group generally stated that any increase in flood stage in the Bypass (for example, by raising levees) would increase flooding in the unleveed areas of the Bypass, requiring structures and pumps to be raised or protected.

Several members of the Working Group stated that the current flowage easements should be reevaluated because of changes in flows.

Mr. Pineda responded that, if this is the case, then claims could be made either through normal court action or through the Board of Control. He added that the existing flowage easements were inexpensive and very liberal, and the government feels that any changes to flows that have been made are within its rights, as allowed by the easements.

Mr. Jones stated that the easements were purchased before the existing dams were built. He believes that the management of Shasta Reservoir, for example, has increased flood duration in the Bypass.

Mr. Yates said that in general the reservoirs decrease peak flows, and flooding would have been worse during the 1990s if Shasta Dam had not been built.

Mr. Jones disagreed, stating that, based on his experience, the duration of flooding that has occurred after the dams were built has been much longer.

The group generally agreed with this statement and stated that the flows must be controlled somehow, since they seem to be very regular.

Mr. Yates explained that the reservoirs capture peak flows, leading to longer durations of flows.

Mr. Jones stated that if this statement is true, then landowners should be compensated for this increased duration.

Mr. Ceppos said that the flowage easements should be examined to see what they allow. He added that if the easements were purchased before the dams were built, they may need to be reevaluated.

Mr. Fulster asked if modifications could be made to the operation of the Deep Water Chip Channel to take pressure off of the Bypass during flood events.

Mr. Pineda responded that more water entering the ship channel would lead to more sediment in the channel. West Sacramento is already looking for ways to deepen the channel to offset sedimentation and would probably not be open to allowing more flows in to the channel. He added that the purpose of the channel is navigation; protecting the channel from increased sedimentation is essential to maintaining this purpose.

Mr. Fulster asked if the channel could be dredged.

Mr. Ceppos reminded the group that this issue had been addressed by Tim Washburn of the Sacramento Area Flood Control Agency (SAFCA) at an earlier meeting. Mr. Washburn had stated that dredging the channel would be economically unfeasible and raising the levees would be much more economically feasible.

Mr. Ceppos stated that hydrology and flood issues would be discussed further at future meetings.

Fair Market Compensation for Habitat Use of Agricultural Land

Mr. Ceppos stated that a frequent concern of the Working Group has been whether fair compensation would be available for any changes to current practices intended to improve fish and wildlife habitat. He said that the project team had taken this concern to CALFED, and CALFED representatives had

stated that landowners would be compensated for any changes to current practices that they agreed to participate in.

Mr. Ceppos further explained that there is a new round of CALFED funding coming up, and proposals for new projects are being solicited. He explained the CALFED proposal process that leads to funding of projects such as the current Management Strategy project. He said that the director of the environmental program at CALFED had expressed concern over how to determine what fair market value for habitat improvement projects might be. The director had stated that he would rather have the landowners determine fair compensation than have the state do so.

Mr. Ceppos stated that the Working Group, YBF, and Jones & Stokes could all work together to submit a proposal to fund a process through which the landowners, with guidance from agricultural appraisers and economists, would determine formulas for setting fair compensation for a variety of possible actions. Mr. Ceppos said that the Working Group members needed to decide at today's meeting whether they would support such a proposal and participate in the project, if it is funded. He explained that the proposal would be due in May, decisions about which projects to fund would be made in the fall of 2000, and the funded projects would begin in January or February of 2001. If funded, the project would probably involve monthly meetings for 6–10 months; these meetings would be similar to the current Working Group meetings. The Working Group could choose to form a subcommittee to attend these meetings, with the group as a whole reviewing and providing input during the process.

Mr. Martinez asked if Jones & Stokes would be paid to write the proposal.

Mr. Ceppos responded that Jones & Stokes would not be paid, but would expect to be included in the project (as a paid consultant) if it is funded.

Mr. Fulster asked if the group would be determining prices for selling their land.

Mr. Ceppos responded that the project would not determine buyout prices. Instead, he said, there are two types of changes that could improve habitat in the Bypass:

1. habitat enhancement practices compatible with current land use and
2. practices that would require changes in land uses.

The current Management Strategy project is focusing on the former. For example, he added, possible actions could include establishment of habitat friendly farming practices, expansion of habitat along irrigation ditches, or winter flooding in dry years. The proposal would be to determine fair compensation for these types of actions.

The group discussed its support for submitting the proposal.

Mr. Ceppos said that, if it is funded, the project would allow the Working Group to have a strong voice in determining fair compensation for voluntary changes to land use practices in the Bypass. He added that the group would be breaking new ground and setting precedent for compensation for these types of projects because nothing like this project has been done before.

Mr. Kilkenny expressed concern over how the proposed USFWS North Delta National Wildlife Refuge (Refuge) could lead to changes to economics within the Bypass and wondered how the proposal would address these possible, unknown changes.

Mr. Ceppos answered that this issue would be addressed during the project process, if the project is funded.

Mr. Egan asked if support for the proposal would be seen as an endorsement of the proposed Refuge by the Working Group.

Mr. Ceppos responded that it would not be intended to be such an endorsement, and a statement to that effect could be included in the proposal. He added that the Refuge is a separate issue from both the Management Strategy project and the proposal being discussed.

Mr. Ceppos stated that YBF and Jones & Stokes could write as much of the proposal as possible for review by the Working Group before the next meeting and would then revise the proposal based on the group's comments.

Ms. McKee added that if the Working Group was not happy with the draft proposal and did not want to submit it to CALFED, it would not be submitted.

Mr. Ceppos asked if the group wanted to move forward with a draft of the proposal.

A majority of the Working Group supported beginning the process.

CONCLUSION

Ms. Kulakow stated that the next meeting would be held on Friday, April 14, 2000, from 10:30 a.m. until 1 p.m. at the DFG Yolo Wildlife Area Headquarters. The agenda for the meeting will include the compensation proposal to CALFED, further discussion of habitat issues, and a preliminary discussion of the Management Strategy document that this project will produce and submit to CALFED.

Mr. Ceppos distributed copies of the booklet *Bring Farm Edges Back to Life*, a publication on habitat friendly farming published by the Yolo County Resource Conservation District.

The meeting was adjourned.