

**YOLO BYPASS WORKING GROUP
MEETING 22**

MEETING MINUTES

MEETING DATE: November 21, 2002

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

IN ATTENDANCE: Robin Kulakow, Yolo Basin Foundation
Dave Feliz, California Department of Fish & Game (DFG)
Dave Ceppos, California Center for Public Dispute Resolution (CCPDR)
Ed Towne, Bull Sprig Outing

Jake Messerli, California Waterfowl Association (CWA)
Dennis Kilkenny, Dawson's Duck Pond
Mark Crossland, DFG
Armand Gonzalez, DFG-Region 2
Dean Kwasny, DFG
John Currey, Dixon Resource Conservation District (DRCD)
Marianne Kirkland, Department of Water Resources (DWR)
Ron Tadlock, Farmer
Chris V. Fulster Jr., Glide In Ranch
Dave Kohlhorst, Glide In Ranch
Don Stevens, Glide In Ranch

Jack Palmer, H Pond
Will Wylie, H Pond
Mark Kezny, Kezny Ranch
Mike Martinez, Martinez Farming Company
John Mohr, Mound Farms
Walt Cheechen, Natural Resources Conservation Service (NRCS)
Jennifer Maclean, NRCS
Kent A Lang, RD 1600
Chuck Dudley, RD 2035, Conaway JH Enterprises
Mike Hardesty, RD 2068
Betsy Marchand, Reclamation Board
Ken Martin, Rising Wings Duck Club
Butch Hodgkins, Sacramento Area Flood Control Agency (SAFCA)
Tim Washburn, SAFCA
Mick Klasson, Consultant to SAFCA
Barbara Gualco, Gualco Consulting/SAFCA

Tom Harvey, U.S. Fish and Wildlife Service (USFWS)
Tony Lucchesi, Wildlands, Inc
Brett Williams, Yolo County Parks and Recreation
Rachelle De Clerck, Yolo Basin Foundation

NEXT MEETING: January 23rd, 2003. 10:30 am to 1:30 pm

ACTION ITEMS:

1. Obtain the website and e-mail address list for Bill Mork regarding local flood forecast reports. Set up a separate meeting to learn how to read the flood forecast reports.
2. Contact DWR-National Weather Service in regards to why the Yolo Bypass concerns were not addressed in determining the monitor and flood stages at Lisbon Weir.

Dave Ceppos called the meeting to order and began introductions of attendees. Mr. Ceppos briefly covered the agenda and the purpose of the Working Group. The Working Group is open to the public and has been in existence for 3 years. It provides a focused opportunity for farmers, land owners and agencies within the Bypass to discuss Bypass related issues and provides guidance and opinions on such issues. Mr. Ceppos recently left Jones & Stokes and is now with the California Center for Public Dispute Resolution.

Mr. Ceppos asked if there were any changes or edits to the draft August 15, 2002 meeting minutes. No changes or edits were requested and the August 15, 2002 meeting minutes were adopted as final.

**Update on the Yolo Wildlife Area Management Planning Process
Dave Feliz, DFG**

Mr. Feliz gave a brief summary of the recently concluded focused management planning process meetings. The meetings were well attended, successful and feedback from the participants included local knowledge. The next task is to review the meeting minutes and decide if additional focused meetings are necessary.

Mr. Feliz's meeting summaries were as follows:

Hunting and Fishing:

When restoration of the newly acquired lands is completed, approximately 8,000 acres of the Yolo Bypass Wildlife Area (Wildlife Area) will be available for hunting of waterfowl. Hunter capacity is estimated to be 250. The majority of the habitat will be large acreages of seasonal marsh.

Current hunting capacity is subject to change, based on how many people are hunting in the blinds. Since the Wildlife Area has been open, hunting capacity has increased. Currently DFG maintains a free roam capacity of 35 hunters and blinds limited to 64 seats are also available.

Approximately 1,600 acres on the west side of the Tule Ranch was discussed for pheasant hunting. The exact location would be dependent on grazing practices and what type of vegetation will grow in that location. Currently, this location is not good for pheasant because it is too heavily grazed.

Approximately 3,800 acres will be dedicated for wildlife viewing and touring. A total of 1,100 acres will be dedicated as a sanctuary. Proposed uses for these areas include wildlife viewing, school tours, hiking and in the case of the sanctuary areas, no public use is allowed.

Flood Protection:

SAFCA may have a one dimensional (1D) model available to model hydraulic conditions in the Bypass. The outcome of the meeting indicated that additional discussion is needed to determine the appropriate model input variables. Mr. Feliz indicated that the State Reclamation Board may be willing to support habitat restoration if an appropriate model is used to assess potential future land use conditions correctly and the results are acceptable with regards to the maintenance of Bypass flood conveyance and capacity.

Agriculture:

Farming practices such as tenant farming, market farming and grazing programs were discussed at this meeting. Tenant farming would be the most feasible approach if the crops were farmed in at least 200-acre blocks.

Custom farming: In custom farming DFG does not receive any money from the crops. Instead each aspect of the farming process (discing, planting, mowing) is contracted separately.

The Department of Fish and Game currently farms about 400 acres.

The grazing program was discussed as a tool to control/change vegetative communities, especially in the vernal pool areas.

Currently farming provides income for the Wildlife Area. As the state continues to have funding issues, agriculture in the Wildlife Area will be an additional supplemental funding source.

Participant Question: Is the funding available for the Wildlife Area.

Mr. Feliz: We will have a dedicated account in the state treasury. At present we are trying to get the account approved but we don't have that agreement yet.

Fish:

There are great opportunities for native fisheries habitats in the Wildlife Area, especially by utilizing the tidal flows near the Toe Drain and flood flows of Putah Creek. However, any changes would have to be compatible with the existing management strategies.

Wildlife Management:

The overall conclusion at the meeting was that the Wildlife Area goals should mirror what is in the Central Valley Habitat Joint Venture Plan but that these goals should also be compatible with flood protection.

Environmental Education:

Tour route ideas and potential locations were discussed. The discussed locations included the Tule Ranch, Umbrella Barn and Green's Lake. Approximately 9 additional miles of auto tour route are anticipated.

In addition to the tour route, it was re-iterated that one of the top two priorities of the Director of DFG are environmental education programs that meets the state's teaching standards. Yolo Basin Foundation in collaboration with DFG is way ahead of the curve in this area. The current educational program should continue with the Foundation managing the teaching portion and DFG providing the facilities.

Where to next:

The next step in the planning process will include a level of analysis that may require an Environmental Impact Report (EIR). Currently DFG is seeking funding to contract for the preparation for this report.

Mr Ceppos pointed out that that minutes for the focus group meetings have not been sent out yet. The minutes for these meetings are likely to range between 15 to 22 pages per meeting. Therefore when recipients receive these minutes via e-mail they will be very comprehensive, large files.

**Update on the Yolo Wildlife Area Hunting and Other Related Programs
Dave Feliz, DFG**

This year's waterfowl opener was the worst in recent years. In 1998, 75 waterfowl were shot on opening day. Successive year openers were as follows:

1999 = 240 waterfowl
2000 = 293 waterfowl
2001 = 281 waterfowl
2002 = 181 waterfowl

Local duck clubs are also experiencing problems. The drought in the North American prairie pothole regions, where the ducks nest during the summer is contributing to the low waterfowl count this year. However, the waterfowl numbers are up in Suisun Marsh.

Participant: I would also attribute the low waterfowl numbers to an increase in closed zones.

Participant: How many hunters were at the Wildlife Area on opening day?

Mr. Feliz: 102

Hunting blinds 8 and 13 are doing well, relative to the other blinds.

Pheasant hunting has had a banner year. The Bypass has not flooded in recent years and so the numbers of pheasants has been steadily increasing. More pheasants (157 pheasants) have been shot this season than in any other season in the first five days. Previous years pheasant opener counts are as follows:

1997 = 19 pheasants
1998 = 8 pheasants
1999 = 10 pheasants
2000 = 21 pheasants
2001 = 40 pheasants
2002 = 42 pheasants

Wednesdays are apparently the day to hunt, with numbers relatively high. On Saturday, November 16, 50 pheasants were planted for the Junior Hunt. Only 14 birds were shot. The Junior Duck Hunt was also poor, with no birds shot.

Update on the NAWCA Grant Process CWA

Dave Feliz gave a brief update on the progress of the North American Waterfowl Conservation Agreement (NAWCA) grant. Yolo Basin Foundation and DFG gave a tour of the Wildlife Area to the NAWCA group in October.

CWA's proposal was ranked #4 in the nation. Items included in the NAWCA proposal are improvements to the northeast unit of the existing Wildlife Area and some improvements to local duck clubs. Ducks Unlimited (DU) has submitted a proposal for the east end of Tule Ranch, the Cosumnes River area and portions of the Delta. DU's proposal may be a year behind the CWA proposal.

Work can get started on the Causeway Ranch no later than the 2005 work season due to time constraints of the NAWCA projects. The approved Wildlife Area Management Plan and associated hydraulic analysis is needed to take advantage of the NAWCA grant. The definitive answer on funding will come in the spring. If CWA receives funding, work could start on improvements in the northeast corner of the Wildlife Area in 2003 and may carryover to 2004.

**Update on E-mail Rollover Process and Distribution of Yolo Wildlife Area Management
Planning Process and Yolo Working Group Meeting Minutes
Robin Kulakow, Yolo Basin Foundation**

Ms. Kulakow informed the participants that beginning the second weekend in December Yolo Basin Foundation will be e-mailing the Working Group meeting minutes. E-mailing the minutes to participants will result in a significant cost savings to the Foundation and ultimately a large savings in CALFED grant money. Ms. Kulakow encouraged participants to send in their postcards with their current e-mail information if they have not already done so.

**Sacramento Regional Project Planning Study
Butch Hodgkins, SAFCA**

Mr. Hodgkins informed the Working Group participants that SAFCA is concerned about flooding along the Sacramento River. While the primary focus of SAFCA is to protect Sacramento from flooding, SAFCA has learned it is important to engage a broad range of people in discussions regarding their needs and to try and incorporate partnerships to fulfill those needs thus providing the greatest level of support for a project to improve flood control. SAFCA is interested in a project that should increase the capacity of Sacramento River Flood Control Project from the Fremont Weir south.

Mr. Hodgkins summarized SAFCA's efforts on the American River, noting that after two attempts to obtain congressional approval of Auburn Dam, SAFCA undertook an incremental strategy focused first on improving levees and then on modifying Folsom Dam. Levee work is authorized and under construction. Three of four steps to improve Folsom Dam are authorized, and the fourth is now before congress. If that last step is approved and constructed, Sacramento will have achieved its goal of 200-year flood protection along the American River.

The levees along the Sacramento River are the oldest levees in the system. Many of these levees were built by dredging sand out of the river, and were constructed prior to the development of U.S. Army Corps of Engineers (Corps) standards for levee construction. Seepage is the greatest threat to these levees. Levee seepage at several locations throughout the system have been addressed by State and Corps levee restoration projects. However, the threat posed by seepage in foundation soils under the levees has not been addressed. Mr. Hodgkins explained how underseepage can cause a levee to fail. Underseepage occurs when the underlying soil layer is of high permeability (i.e. sand) and the surface layer of soil is of low permeability (i.e. clay). The sand layer provides a conduit for water under the levee while the overlying clay layer acts as a confining membrane. Water pressure in the sand layer begins to push the clay layer up (also referred to as heaving). Eventually the clay layer ruptures and the sand layer becomes a pipe for water. As the water flows through the rupture, sand is carried away creating a void beneath the levee. The levee settles into the void and the levee is overtopped.

Participant Question: What about the levees from Freeport south?

Mr. Hodgkins: I think every levee in the Central Valley has this problem.

Participant Question: Are you going to address the levees from Freeport south?

Mr. Hodgkins: I don't think the levees from Freeport south will be ignored, but SAFCA's area of focus is Sacramento.

Underseepage is a tough issue to analyze. Soil borings provide some information, but don't show how soil conditions change between borings. Consequently, the normal approach is to assume you must construct controls continuously even when intermediate borings may indicate controls are not needed. Currently, underseepage is a concern from Freeport to Verona, and is a very costly problem to address. For example, in the Pocket Area, costs may range between \$30 to \$50 million and in the Natomas region anywhere between \$100 to \$200 million. This is all compounded by the fact that there is too much water coming through the system.

Participant Question: We sometimes feel like you ignore the Delta and only worry about Sacramento.

Mr. Hodgkins: SAFCA is an elected board and their job is to address the concerns of the population that elected them. Sacramento residents elect SAFCA's board members; therefore SAFCA concentrates on improving Sacramento's flood control problems. In addition, Corps standards require that project benefits be at least equal to project costs. This can make it very costly to improve flood protection in undeveloped areas.

Mr. Hodgkins presented a graph of unregulated Sacramento River system flows at Verona that demonstrates peak flows and trend line flows are increasing. SAFCA has developed a 200-year storm model that can be used in designing improvements that would provide 200-year protection. Models show that such a storm would overtop Yolo County levees in East Elkhorn, which are lower than Sacramento county side levees. Once flooding begins, most of the Elkhorn area is flooded. Additional water probably goes into the Bypass, and may raise water levels high enough to overtop the navigation and Bypass levees protecting West Sacramento.

Participant Question: Can't Yolo County levees be raised?. If the Sacramento city side is going to raise levees why can't the farming side raise their levees?

Mr. Hodgkins: From a practical standpoint, the Sacramento side levees are already higher, and when push comes to shove Sacramento residents would be upset by a potential for an increase in flooding on the city side that could result if the Yolo levees are raised. Consequently raising levees is not the best approach, as it tends to shove water onto someone else.

Transitory storage was an option considered in the Sacramento and San Joaquin Rivers Comprehensive Study. In the event that farm land under transitory storage easements is damaged by a flood, the damages will be repaired and property owners will be compensated for their losses. But farmers need to understand that in a large flood like 1997, farm lands will flood first because of their lower levees and property owners who are flooded are not assured of being compensated. Under the transitory storage concept, flood damage is minimized and property owners are compensated for their damage.

Participant Question: Isn't the real worry that when flooding occurs in the Elkhorn area, the water will back up against and fail the north Sacramento bypass levee and then run into both the Yolo Bypass and the Sacramento River, thus negating any improvement in flood control?

Mr. Hodgkins: That is a possibility that we have not analyzed, but we will look at it in the future.

An option that benefits Yolo, Sacramento, Yuba, Sutter, Placer, and Solano counties is to increase the capacity of the Yolo Bypass. Elements of such a project include widening the Fremont Weir, setting back the levee between the Fremont Weir and Interstate 5. The Bypass is constricted at Interstate 5. Below Interstate 5 increase the Bypass again by setting levees back. Below Interstate 80 put an operable weir from the Bypass into the Deep Water Ship Channel (Ship Channel) and gates to prevent back-up of flood flows into the Port of Sacramento. Lastly, in order to increase conveyance capacity, remove the restricted height levees in the lower Bypass (e.g., Liberty Island, Egbert Tract).

What will the flood control project do? Overall, it will lower water surfaces in the Yolo Bypass and in the Sacramento River including Sutter, Yuba and Placer Counties. In addition it will:

- preserve agriculture,
- provide opportunities for water and flood control improvements for Yolo County cities,
- provide opportunities for Bypass landowners,
- provide opportunities for environmental restoration,
- reduce cost of SAFCA projects,
- and provide an opportunity to improve government cooperation in the Central Valley.

The project will not:

- increase the frequency of flooding in the Bypass,
- or place new unmitigated burdens on Bypass landowners.

Participant Question: Is there any potential increase in the duration of flooding?

Mr. Hodgkins: The duration of flooding is likely to increase because this approach shifts more water into the Bypass. However, adding the weir into the Ship Channel may mitigate for this in events greater than about a 50-year storm because some of the increase goes into the Ship Channel. We need to do more analyses to get a better handle on the changes in duration.

Participant Question: Why wait for a fifty year flood to open the Ship Channel when the Bypass floods? Why not open it during any flood?

Mr. Hodgkins: While it may be possible to open it for a smaller storm, it can not be open all the time, because closing the gates that prevent flooding of the Port will shut down shipping.

Participant Question: Is the east levee of the Ship Channel good enough to handle the added flow?

Mr. Hodgkins: We are proposing to limit the amount of water that goes into the ship canal to 50,000 cubic feet per second (cfs), which is not enough to go over the existing berm. However, more analyses of these levees are also part of the study.

Participant Question: If you only put water into the Ship Channel for a 50-year flood, aren't you putting more water into the lower Bypass in most flooding conditions?

Mr. Hodgkins: Yes, but it also depends on what you do with the levees in Liberty Island and other key places. Removing these low levees could help drain the lower Bypass more rapidly.

Participants: The implication is that the project will lower Bypass flood levels by about a foot. In most years it's not going to do that.

Mr. Hodgkins: I apologize, in smaller floods there is a higher water level in the lower Bypass. The frequency and duration we don't know yet.

Dave Ceppos: Therefore, there is a concern regarding whether non-design events will result in deeper water and more frequent flooding in the lower Bypass.

Participant Question: If you are going to put the gate in for the Ship Channel, why can't they utilize the gate to let ships in and out and still use it to regulate small flood flows?

Mr. Hodgkins: I am unsure, we haven't thought about that detail at this point.

Participant Question: Are you going to increase the velocity of Bypass flood flow?

Mr. Hodgkins: It will probably increase a little, possibly by 2 cfs.

Participant Question: If you increase the flood flow, will we see a lot of gouging and erosion on farm land?

Mr. Hodgkins: I don't think it will be significant, but more analysis will clarify this point.

Participant Question: When you define what the capacity of the Bypass is? Will it be where it is now or where it should be given future capacity needs and past design performance requirements?

Mr. Hodgkins: The capacity should be at more than either of your concerns.

Participant: You need to define what the capacity of the Bypass is.

Participant Question: I don't agree that flood frequency of the Bypass is going to stay the same. All these changes have increased the frequency and velocity. All these changes are not going to help at all in the lower Bypass. Urbanization will cause increased frequency of floods.

Mr. Hodgkins: We are not changing the elevation of the Fremont Weir so water won't flow over the weir more frequently than it does now. That's not to say that additional changes further up the system along the river won't change frequency of flooding.

Participant Question: The people who have changed all the land around the Bypass and funneled all this water in the Bypass should take some responsibility. There is an easy answer, just buy us out and turn it into a river channel.

Mr. Hodgkins: That is not outside of the realm of discussion here. But what I don't want to do is create additional concerns such as loss of agriculture in Yolo County and the Central Valley.

Participant Question: You're only going to lose maybe 25,000 acres of farm land which is really insignificant. The ground will become useless for farming if flooded every spring. Maybe there is another use for it.

Mr. Hodgkins: What about custom farming? How about a program where you get compensated for flood loss?

Participant Question: Is the Bypass going to flood faster?

Mr. Hodgkins: I can't answer that question, but my instinct says yes. It is a topic that needs to be addressed.

Participant Question: Is it going to flood more frequently and rapidly? I'm concerned about lead notice. My conservation easement requires I maintain levees and wetland habitat.

Participant Question: Are you going to do channel improvements along the Sacramento River and gate improvements at Oroville? Velocity is a big issue. Everyone is caving into political reality of flood control, but not dealing with increasing reservoir capacity. It doesn't make sense to spend so much money for flood control and not include storage too.

Mr. Hodgkin: If you need a better forecast, I can help you get a better one. The information is available. Bill Mork (the state meteorologist), puts out a daily e-mail in the winter when there is threatening weather. These notices are usually 3-4 day notice.

Mr. Ceppos: Mr. Hodgkins will obtain the website address and assist us with reading the reports at the next meeting. In addition we will obtain information regarding the Lisbon Weir monitoring and flood stages and why Bypass landowners concerns were not addressed.

Participant: Removal of the stair step levees (Liberty Island) could have some detrimental effects to the lower Bypass because of tidal influence.

Participant Question: Why don't you dredge the Sacramento River?

Mr. Hodgkins: In a big flood we are dealing with 500,000 cfs in the Sacramento River system. In these events, the flow split at the Fremont Weir is about 80 percent into the Bypass and 20

percent in the Sacramento River. If the river were two feet deeper, it might carry an additional 10,000 cfs, or about 2 percent. To achieve this increase, you would have to dredge the channel every year from Fremont to Rio Vista. Dredging for additional capacity does not make sense.

Participant: You're completely right about proportion; however you're forgetting about the sand bar on the Feather River. Eventually the levee is going to fail because of the sandbar causing deflection of the water that may direct flows into levee walls.

Mr. Hodgkins: It may make sense to dredge the Feather River. This is where people who have been out there can help us. You know the changes that have affected the bottom of the river, such as the sand dam moving down the river. The Feather River needs to be cleaned. We have been approached by Teichert for areas where they can get more sand.

Participant: We are proposing to sell our sand to Teichert, sell our water to Sacramento Municipal Water District and the lower part of our property to the U.S. Fish and Wildlife Service.

Participant: If the State bought our land they could lease it for farming, etc.

Originally land in the Bypass was bought by the State in fee, but there was a large outcry. The State sold back the property and put in easements. However, government fee purchases with lease options back for agriculture or habitat might make sense. If Yolo County and Solano County give up this land to flood control, the counties will benefit immensely.

Participant: I would hate to see the tax base disappear and all the farmers disappear. The current agriculture practices keep the Bypass clean and convey flow for everyone. Not all of us support the concept of fee title purchase.

Betsy Marchand: We need some factual explanations that could be handed out on various issues. Such as the increased water coming this way and why is that so. In regards to the new models that the Corps has done, what do you think that they will add to this process?

Mr. Hodgkins: We are using the model the Corps used for the Comprehensive Study. We had MBK Engineers look at the model in detail because we are not 100% sure it reflects the reality of the situation. I am unfamiliar with the 2D and 3D models. The 2D model looks at different velocities at different places in the same cross section. Steve Chainey from Jones and Stokes has described what the water is doing on the upstream weir. It's basically a moving lake.

Participant Question: Two impacts need to be addressed. Longer duration floods result in a loss of nesting season. Also, a look at the effects of the changes of duration of floods and velocity on the multiple types of conservation easements in the Bypass should be conducted

Participant: Please discuss lengthening the Fremont Weir and also fish passage through the Bypass.

Mr. Hodgkins: Fish experts are interested in making the Tule Canal suitable for fish conveyance. SAFCA is interested in incorporating environmental restoration into the project, because environmental restoration features are subject to more generous cost effectiveness guidelines and are therefore easier to justify. To the extent environmental measures help with flood protection, they can overcome the problems of improving flood protection for agricultural lands that can't meet more rigorous Corps of Engineers cost-benefit tests.

Marianne Kirkland: In the old plans for the Fremont Weir, the original weir was designed with a large notch.

Participant: There used to be a steelhead run up Putah Creek. Maybe we should worry about Putah Creek as opposed to the Fremont Weir.

Mr. Hodgkins promised to keep the group informed and to provide updated information as it becomes available.

Dave Ceppos: Summary of what has been said:

1. Will non-design events result in deeper water more frequently in the lower Bypass?
2. Why can't ships move through the Ship Channel with small flood flows coming through the proposed operable weir?
3. Will flood flow velocities increase?
4. Is the capacity of Bypass currently where it should be?
5. Urbanization will cause increased frequency of floods in the Bypass.
6. Suggestion to buy out all Yolo Bypass land and lower Fremont Weir.
7. Will the Bypass flood faster? .
8. Concern of flood lead notice.
9. Concern of impact to existing conservation easement habitat management regulations.
10. What about channel dredging on the Sacramento River and Oroville improvements?
11. It doesn't make sense to spend so much money for flood control and not include storage options also.
12. Removal of stair step levees at Liberty Island could cause tidal impacts to land owners.
13. Sandbars cause deflection eddies of water that may direct flows at levee walls.
14. Government fee purchases with lease options back for agriculture or habitat might make sense.
15. Yolo County tax base needs to be protected.
16. Dislike the idea of agriculture displacement and loss of agriculture practices That currently keep the Bypass clean and conducive to flow conveyance.
17. Need fact sheets describing issues (e.g. future flood flows)
18. What might the new Corps models tell us in regards to the SAFCA proposal.
19. Not all landowners support the concept of fee title purchase.
20. Longer duration floods in Spring impact nesting habitats. (also impact grazing practices), and vegetation management in Wildlife Area.

Meeting was adjourned. Next meeting scheduled for January 23, 2003.