## YOLO BYPASS WORKING GROUP MEETING 27

#### **MEETING MINUTES**

**MEETING DATE:** SEPTEMBER 11, 2003

**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, Center for Collaborative Policy (CCP)

Ric Reinhardt, MBK Engineers

Patrick Akers, California Department of Food and Agriculture (CDFA)

Bryan Plude, Canvasback Consulting

Phil Martinelli, Channel Ranch Vince Rosdahl, Channel Ranch

Lori Clamurro, DPC

John Currey, Dixon Resource Conservation District (RCD)

Boon Lek, Department of Water Resources (DWR)

Roger Churchwell, DWR

Marianne Kirkland, DWR

Mike Mirmazaheri, DWR

Michael Perrone, DWR

Greg Green, Ducks Unlimited

Ted Sommer, DWR

Chris Fulster, Glide In Ranch

Dick Goodell, Glide In Ranch

David Kohlhorst, Glide In Ranch

Don Stevens, Glide In Ranch

Jack Palmer, H Pond Ranch

Gus Yates, Hydrologist

Mark Kearney, Landowner

Armand Ruby, Larry Walker and Associates

Ron Morazzini, Representative for Supervisor Mike McGowan

Selby Mohr, Mound Farms

Erin Strange, NOAA Fisheries

Tom Scheeler, Port of Sacramento

Mike Hardesty, Reclamation District 2068

Cyndi Martin, Rising Wings Preserve

Ken Martin, Rising Wings Preserve

Mark Martin, Rising Wings Preserve

Butch Hodgkins, Sacramento Area Flood Control Agency (SAFCA)

Ray Thompson, Skyraker Duck Club

Walt Cheechov, USDA, Natural Resource Conservation District (NRCS)

Phil Hogan, USDA/NRCS

Tom Harvey, USFWS Stone Lakes National Wildlife Refuge

Tony Lucchesi, Wildlands Inc.

Kingsley Melton, Assemblywoman Lois Wolk Field Representative

Bon Leonard, Yolo Basin Farms Inc.

Rachelle De Clerck, Yolo Basin Foundation

Gaye Lopez, Yolo Basin Foundation Board Member

Beth Gabor, Representative for Supervisor Helen Thomson

Chuck Dudley, Dudley Ag

Ron Tadlock, Farmer

### NEXT MEETING: November 13th, 2003. 10:30 am to 1:30 pm (POSTPONED)

#### **ACTION ITEM:**

1. Determine whether there is a way to augment Conservation Resource Enhancement Program (CREP) to include other land uses in the Bypass such as duck clubs.

Dave Ceppos called the meeting to order. The Working Group has been in existence for four years. During that time the Yolo Bypass Management Strategy was developed. It discusses the possibilities for future land use changesand a wide range of landowner concerns.. The Management Strategy has been used by many agencies in the area.

Mr. Ceppos briefly summarized the agenda.

# Update on Regional Water Quality Control Board Agricultural Waiver Water Quality Issues John Currey, Dixon RCD

The Central Valley Regional Water Quality Control Board (RWQCB) passed the latest version of the conditional agricultural waiver for irrigated lands and wetlands on July 11, 2003. Under the Porter-Cologne Act all lands that discharge water into State waterways are required to report waste discharge, and improve water quality to meet State standards. In 1982 the State passed a 20-year agricultural waiver. In December 2002 the agricultural waiver was sunsetted. In anticipation and as a result of this sunset condition, the RWQCB proposed a range of options that water dischargers could pursue to remain in legal compliance. Agricultural landowners and owners of managed wetlands have three choices in regards to discharge water: join a watershed group, comply as an individual, or file reports of waste discharge. RWQCB is not set up at this time for reports of waste discharge. However, this choice means reporting parties have to immediately meet State discharge standards. Currently the agricultural waiver exempts agricultural landowners and managed wetlands from reporting waste discharge. Agricultural landowners and managed wetlands that are associated with a watershed group will not have to pay fees directly to the State.

Participant Question: What happens if landowners in the Bypass don't get a watershed group up and going?

Answer: Environmental groups could go to RWQCB and push for individual compliance to standards or not to discharge until they can comply.

The California Farm Bureau calculated the costs to individual landowners assuming an average farm of 200 acres with a single point of discharge. In order to implement monitoring by July 2004, the cost will range from \$3,000 to \$6,000 per entity. Monitoring a single point of discharge is estimated to cost between \$7,000 to \$14,000 dollars annually. There may be potential to modify monitoring plans. For example, a farm with uniform cropping patternss and multiple points of discharge may be treated as a property with one point of discharge.

Notices of intent and an inventory of properties owned by landowners involved in a watershed group is due by November 1, 2003. Detailed property and pesticide descriptions are due April 1, 2004 along with monitoring plans.

Participant Question: If a landowner is aligned with a coalition watershed group, what do they have to do as individuals?

Answer: The Dixon RCD will send out a sign-up sheet during the week of September 15<sup>th</sup> through the 19th, 2003 with requests for names, parcel numbers, tenants. Fees are to be paid up front and are \$2.00 per acre. Other watershed groups are requesting from \$1.50 to \$3.00 per acre, depending on location of the properties.

The Sacramento Valley Coalition is filing a notice of intent on November 1<sup>st</sup>; and hoping the application will be accepted by RWQCB. The Sacramento Valley Coalition filing doesn't remove land owners from the obligation of joining local groups. In order to maintain the confidentiality of individual land owners, the Dixon RCD is trying to aggregate local data to submit to RWQCB. In this way, local groups can work with individual land owners to correct problems. Only gross errors will be reported to the State.

Participant Question: Is the fee the same for Bypass duck clubs in the Dixon RCD coverage area?

Answer: Yes. At some time in the future, the per acre fee may be revised to reflect the specific land use of the property but as this time, the RCD needs to move ahead rapidly and is assessing the fixed fee on all cooperating properties. This issue will likely be a point of discussion at future meetings of the watershed group participants. Because the Bypass is unique, the watershed group will consider the nature and properties of the Bypass that will affect monitoring plans. The RWQCB is aware of the unique situation in the Bypass. A location within the Bypass will be selected to represent the collective summer draining of Yolo and Solano Counties for the monitoring plan. Sampling will not be conducted during full flood events in the Bypass.

Participant Question: Does the Department of Fish and Game (DFG) have to comply on their properties?

Answer: All lands have to participate in the program in some capacity.

*Participant Question*: DFG supplies water to our property, therefore who is responsible for monitoring and compliance?

Answer: Both parties will be responsible

Participant Question: All the duck clubs flood and receive their water from upstream properties. Therefore all discharge from the duck clubs is from other properties. Won't the duck clubs be disproportionately penalized for non-compliance with discharge?

*Answer*: If the duck clubs are affiliated with a watershed group, discharge from the duck clubs will be included in the group monitoring which will be representative of the whole region, not just individual properties.

Participant Question: The duck clubs do not participate in farming and only discharge waters off of their properties during flood events. How does this impact the duck clubs?

Answer: Managed wetlands are required to participate including storm water runoff from duck clubs. It is an immediate requirement of managed wetlands and agriculture land to enroll in the program.

*Participant Question*: If upstream properties discharge onto downstream properties due to natural flow patterns how does that impact the downstream property?

Answer: If the downstream property owner participates in the program as an individual they should be concerned about discharge onto their property. If the landowner participates in an aggregate group the discharge would be considered a regional problem.

*Participant*: Duck clubs should not pay the same rate as agriculture properties because the duck clubs don't contribute to the discharge problem.

Watershed groups will need to assess the qualities and characters of individual properties and their threat to State Waters. As previously discussed, once the assessment is complete, variable rates can be justified. Watershed groups will first need factual reasoning to grasp why some properties will have to pay more than others. This will also provide an opportunity to create incentives to improve land practices and reduce costs for landowners over time.

Participant Question: If a property is a managed waterfowl area and doesn't discharge how is that property affected?

*Answer*: The program also applies to storm water that leaves the property.

Participant Question: Has RWQCB considered that water quality is often improved by wetlands?

Answer: RWQCB doesn't have any hard science to prove that water quality is improved by wetlands; therefore this program was put into place to collect water quality data.

Participant Question: How can landowners be penalized?

Answer: The base law allows for civil penalties for landowners who are discharging pollutants. In the watershed group, landowners are shielded from immediate liability. Therefore monitoring will be conducted and problems identified without identifying individual landowners. Regional modifications will be implemented to improve water quality within watershed groups. If a site within the watershed group consistently violates State standards, the RWQCB will take over for that site. Individual landowners will have to meet state standards immediately and will work directly with RWQCB.

Participant Question: Bypass flows are extremely complex. Does the monitoring plan require information about flows and volumes?

*Answer*: Yes, but the complexity will be brought up with the RWQCB. Sub-watersheds will need to look at the true geographic areas, find areas that yield good results without monitoring every ditch in order to avoid inadequate data.

Participant Question: What will be the penalty for non-compliance?

*Answer*: Landowners will be given notice. Fines can be on a per day basis which is determined according to the severity of non-compliance

Participant Question: What is northern boundary limit of the southern Yolo Bypass?

*Answer*: Interstate 80, Putah Creek and all of Solano County. North of the southern Yolo Bypass is included in the Yolo County Group.

Participant Question: Is there a group forming to oppose this legislation?

Answer: There are many appeals to modify the legislation and make it more palatable.

Landowners have a couple of options; participate as an individual or in a watershed program. Because this is a mandated program and there is no State money to run the program, watershed groups are looking for landowner fees to help with the cost. The Yolo County group is requiring a \$1.00 to \$1.50 per acre and Solano County is requiring \$2.00 per acre for start up costs. An outreach meeting is scheduled today (September 11, 2003) at 2:00 pm at the Winters Community Center for detailed information. Monitoring will begin July 2004. Difference in discharge and land management should be applied to fees on a per acre basis. Land management and discharge differences will be investigated further, but currently there is a flat fee which may be adjusted at a later point in time.

Participant Question: Will the fees be assessed on all the acreage on the property or only the acreage that is flooded?

Answer: Irrigated land only.

# **Update Yolo Bypass Water Quality Planning Process Armand Ruby, Larry Walker Associates**

The Yolo Bypass Water Quality Project is funded by CALFED to the City of Woodland in cooperation with the City of Davis and University of California at Davis (UCD). The State issues waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permits. If dischargers are proactive and monitor as an individuals or as a group they can avoid the NPDES waste discharge requirements. NPDES is stringent and mandates specific minimum fines on a daily basis for each infraction. This stringency is what prompted the City of Woodland and those in cooperation to monitor discharge on a watershed basis. NPDES permitees and other permitted entities are unfunded mandates and rely on money that is charged to constituents. The City of Woodland has begun to reach out beyond the major project stakeholders to include landowners and farmers in the Bypass. Anyone who is interested should contact Armand Ruby at Larry Walker Associates (530-753-6401, armandr@lwa.com).

The major focus of the Yolo Bypass Water Quality Project at this time is to put together the monitoring plan and implement it by October 18, 2003, which coincides with World Water Monitoring Day. The current idea is to use volunteers to assist with the water quality monitoring. The goal is to try and figure out the complex hydrology in the Bypass to best represent flows in Bypass. The draft plan is scheduled for completion by the end of next week and as well as have the network of sampling volunteers lined up.

Participant Question: Where will the stakeholder minutes be available?

Answer: Either through Armand Ruby or Robin Kulakow. *Participant Question*: Who should want to be stakeholder?

*Answer*: The stakeholder group should consist of a cross section of state agencies, local agencies, farms, recreational and management interests.

Participant Ouestion: Can electronic minutes be made available on a website?

Answer: They can be made available on the Yolo Basin Foundation website (www.yolobasin.org).

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

DFG has received funding from the Wildlife Conservation Board for the preparation of the Management Plan. DFG is considering a contract with the UCD based John Muir institute for

the preparation of the plan and associated CEQA document using teams of faculty, graduate students and renowned experts. DFG will have the ultimate approval of the final plan. The tentative contract date is slotted for November 1<sup>st</sup>, 2003.

The final management plan will comply with CEQA through the development of an Environmental Impact Report (EIR) which will be prepared by DFG in partnership with UCD staff. Many of the current DFG management plans are very non-specific and do not include maps, numbers and only outline missions and goals.

Note: Since the following presentation was made, UCD has informed DFG that UCD staff will not be available to assist in the preparation of the Environmental Quality Act (CEQA) document.

*Participant Question*: This will be a policy and guideline document for the Wildlife Area. At what point will DFG develop an administrative document for the management plan?

Answer: . Issues were discussed at the focused Wildlife Area Planning meetings last fall DFG will conduct formal CEQA public scoping as required.. Mr Feliz also reiterated that the UCD staff will not be making CEQA or planning decisions. That is the legal responsibility of DFG

## Hunting Season 03/04

The Duck Hunting Opener for all DFG Sacramento Valley Wildlife Areas has been delayed until November 1<sup>st</sup>, 2003 due to the late rice harvest. In addition DFG's operating budget has been cut by \$330,000.00 this year. Therefore, DFG is not printing hunting regulations this year. Waterfowl regulations can by downloaded from the DFG website. Duck stamps will not be sold at the Yolo Bypass check station, only one day hunting passes. Closed zones and tour routes will remain the same.

The 2003 Dove Opener resulted in 279 birds and 207 hunters.

#### North American Wetlands Conservation Act Project

Levees have been reconfigured and a new canal constructed in the northeast unit of the Wildlife Area. Each unit can be independently flooded and drained and it didn't cost the State any funds because it was completed with Federal monies.

Participant Question: What is going on with the rock being installed near the Wildlife Area entrance along the south side of I-80.

Answer: The rock going next to the freeway is a Caltrans project and is not associated with DFG.

Participant Question: How much money does DFG get from farming?

*Answer*: About \$400,000. DFG has an agreement with the Dixon RCD who receives the money which is then spent on projects within the Bypass.

Participant Question: How much of that money goes to fisheries? Will water ways in the Wildlife Area have enhanced connections to the Toe Drain?

*Answer*: It's a possibility. One of the ideas to be considered in the Management Plan is to run Putah Creek to and through the historic Putah Sinks and continue south through historic sloughs in the Bypass.

# **Update on SAFCA Regional Flood Management Planning Process Dave Ceppos**

SAFCA has been working on a partnership to revise and update flood management in the Southern Sacramento River Area. Flood management improvements might include, widening Fremont weir, removing interior levees, and removing resistance in the system as a means to decrease the water surface elevation of design flood events . SAFCA is creating regional partnerships with northern areas also. SAFCA has come to a conclusion that a regional collaborative project is the most effective way to assess and potentially implement changes in the Sacramento River and the Bypass. Such a project would affect and therefore need to include interests from agriculture, urban communities, and environmental advocates..

## Creation of an Agricultural Task Force

The agricultural task force will answer the following questions:

- 1. How does agriculture land management need to function in the Bypass to maintain flood control in Bypass and keep agriculture economically feasible?
- 2. What are flood constraints and environmental benefits?

# Creation of a South Bypass Focus Group

Through mutual discussions between SAFCA and YBF there is a proposal to create a subgroup of the Working Group in the Southern Bypass to address the issues specific to that part of the Bypass. The focus group would start out with a subset of issues and poll landowners for issues that concern them to create future discussions for the subgroup. SAFCA issues include removing interior levees and how that affects flooding. Affects on publicly owned lands that were to have been in the proposed U.S. Fish and Wildlife Service (USFWS) North Delta Refuge would also be addressed. Other concerns to be discussed include how communities such as Rio Vista will be impacted. Meetings will be open to all comers, but will focus on South Bypass issues. The meetings will likely be held in someplace closer to the Southern Bypass.

Participant Question: Any idea of when the first meeting will be?

Answer: We anticipate December at the earliest.

Update on Corps/State Reclamation Board Hydraulic Modeling Project for Yolo Bypass

#### Mike Mirmazaheri, DWR

The State Reclamation Board doesn't have funding for the Hydraulic Modeling Project for the Yolo Bypass; therefore money from Proposition 204 will be utilized if it is signed by September 2003. Together with the U.S. Army Corps of Engineers, the State Reclamation Board will develop a 2-D model for the Yolo Bypass. Work is slated to begin in November 2003.

The study will be based on topographic information from a comparative study. Any missing information will have to be developed. A technical workbook will be developed at the same time. The model will be calibrated to 1997's high water levels. This project will not be able to update levee problems.

Participant Question: Which version of RMA will be used?

Answer: RMA 2.

Participant Question: Will calibrated datum between gauges be included in the model?

Answer: The Reclamation Board is not yet certain which datum will be used to calibrate the model. The Reclamation Board anticipates that the model will be split into pieces because the geographic area to be addressed (the Bypass) is so large.

# Conservation Reserve Enhancement Program (CREP) for the Delta Pat Akers, California Department of Food and Agriculture (CDFA)

Growers are facing increasingly difficult challenges meeting environmental requirements and staying economically viable. The CREP helps farmers make land management and business decisions to maximize their productivity, minimize activities on minimally productive lands, and comply with environmental requirements.

#### What is CREP?

- CREP stands for Conservation Reserve Enhancement Program
- CREP is a sub-program of the Farm Bill's Conservation Reserve Program (CRP).
- CREP funds come from USDA and are administered by FSA
- Both programs issue set-aside contracts to farmers to take USDA commodity crop (e.g., rice, cotton, corn, wheat) lands out of production and install NRCS conservation practices on them (e.g., native grass cover) for 10-15 years in exchange for rent.
- CRP is an on-going program, entirely funded by USDA, with occasional enrollment periods, It applies statewide.
- CRP presently doesn't serve California's needs very well
  - In the last enrollment from this summer, approximately 2-million acres were enrolled in 41 states.
  - California enrollment was approximately 4500-acres or roughly 0.2% of the total acres enrolled.

- The main problem is the payments are based on dryland farming and are too low for irrigated agriculture.
- CREP requires development of a program locally or at state level, in cooperation with USDA (FSA and NRCS).
- The program must identify a geographical area to focus on and identify particular environmental goals (water quality, habitat).
- CREP requires at least a 20% non-federal (state) match of the funds provided by USDA.
- CREP allows flexibility in the tailoring of rent payments, kinds of lands targeted, technical assistance, payments for maintenance, conservation practices in order to meet local conditions, payments for installing practices.
- CREP provides for up to a 90% cost-share for installation of conservation practices (e.g. re-vegetation with native grasses) on set-aside lands.
- In the Sacramento Valley CREP rent of row crops is \$100/yr/acre and \$170 for rice. There are specified and very clear set of practices to achieve specific goals. Other CREPs in other states are various combinations of incentives, targeted lands, environmental goals, and targeted practices.

# Why is CDFA interested in CREPs?

- Growers are facing increasingly costly environmental challenges and restrictions on the use of their lands.
- CREP can offer one tool to help farmers stay in business and help them try to meet environmental demands.
- CREP can pay an adequate rent to farmers to manage their lands for environmental goals.
- CREP uses a delivery system many farmers are used to dealing with (NRCS, Farm Services Agency).
- The Secretary of CDFA wants California to receive more USDA conservation funds.
- CDFA wants to see more money being spent by CALFED go towards helping growers stay on the land and be rewarded for their good work, especially in the Delta Area.

# Developing a CREP

- CDFA staff can provide technical writing and research services in developing a proposal.
- In order to fulfill Federal Endangered Species Act requirements (ESA), a Biological Opinion must be prepared. CDFA staff is willing to work on this and have been told by the USFWS that consultants are more efficient, but USFWS is willing to provide guidance. DFG may help on California ESA requirements.
- Local interest and participation is needed. For example, ideas on conservation practices could be addressed including: where they would work best, documenting level of interest, and local economics.
- The 20% state match must be identified. The CALFED Ecosystem Restoration Program (ERP) has \$20-million earmarked by law (Proposition 50) to help farmers

incorporate conservation practices into their ongoing operations. They have repeatedly indicated an interest in working with USDA to develop some program.

CDFA would like Bypass interests to consider the possibility of pursuing a CREP in the Southern Bypass. CDFA will continue to work on resolving the funding and inter-agency coordination that needs to occur for a Delta / South Bypass CREP to happen.

*Participant*: It has been speculated that CALFED state entities are not currently interested in providing state match for wildlife friendly farming. CALFED-ERP had specific goals in different management areas throughout their program. The Staten Island purchase and associated conservation and agricultural easements for the island met those goals in this region. Is that true?

Answer: CDFA is more interested in the Bypass because of its flood capacity. CALFED does have a numeric acreage goal was for wildlife friendly farming, however CREP could address flood control or water quality etc. However, admittedly there is more enthusiasm for surrounding areas around the Delta.

*Participant Question*: Has there been a discussion with the Reclamation Board to make sure CREP is compatible with flood control issues?

Answer: CDFA is aware of this issue but has not had a formal discussion with or commitment from the Reclamation Board

Participant Question: If acreage is put into CREP, what can it be used as?

*Answer*: The acreage can be put into nesting habitat and/or water. Water is limited to 10 acres and the rest would be nesting habitat and brood ponds. Grazing is not permitted and weeds must be managed.

Participant Question: How does CREP deal with the economic loss due to loss of production and the associated loss of taxable revenues and property taxes?

*Answer*: There are no allowances in CREP to cover in lieu fees to cover the loss of property tax, nor to cover the loss of taxable revenues from agricultural production.

Participant Question: Is there enough flexibility if there is property moved to fallow lands?

*Answer*: Not currently. Currently, by law, no more than 20% of farming in the country can be enrolled.

Participant Question: Is there a geographic area that CDFA is focusing on? The Bypass seems desirable especially upland habitat during floods.

Answer: No geographic lines are drawn as of yet.

Participant Question: What are the local economic impacts of putting lands into the CREP? For instance, what impact does the loss of productive land have on local taxes, on local assessment districts like Reclamation Districts and Irrigation Districts that rely on member fees to stay solvent Similarly, what are the local impacts to the agricultural economy like labor, materials, etc by taking land out of production

Answer: CREP offers another alternative to help farmers keep their bottom lines up. CREP does not advocate taking productive land out of production but rather, it advocates helping a farmer focus their energy on making the productive land most productive. In that context, it should not impact local economies dependent on healthy production. The impacts to assessment districts and local property taxes is less clear and needs to be addressed.

Participant Question: What is the time frame?

Answer: The first proposal solicitation package will be due next summer or fall.

# Proposed Department of Water Resources (DWR) Fish Passage/Fish Study Structures in the Yolo Bypass Roger Churchwell, DWR

The DWR Fish Facilities Section will install, operate and maintain a resistance board weir in a study to provide engineering and biological design information for fish passage. This project will determine the physical and environmental conditions under which the fish pass the weir. Results from this study will have application at other facilities and locations throughout the Central Valley including the Sacramento-San Joaquin Delta.

Specific questions DWR seeks to answer include:

- How do the target species (Chinook salmon, striped bass, splittail and sturgeon) behave near a fish passage impediment?
- How close do fish need to be to identify the fish passage opening in the weir?
- Is passage of fish through the weir impaired by water velocities?
- During what time of day or night do fish pass through the facility?

#### What is a resistance board weir?

A typical weir used in fishery studies is a fence-like structure that does not impound water but allows flow to pass downstream, while at the same time preventing fish from moving upstream. The resistance board weir for this application is a hinged, porous structure that limits the area where fish can pass, while allowing the water to continue to flow past. The resistance board weir prevents the passage of fish along its length, except at a passage chute at which fish can be counted as they swim upstream. The resistance board weir is composed of polyvinyl chloride (PVC) pickets, joined to form rectangular panels that are then hinged to a steel foundation. The downstream end of the panel is supported above the water surface by the floatation of the PVC pickets and a resistance board that planes upward.

Because of its hinged design, the weir is resistant to washout and virtually self-cleaning during debris laden high water events. It will not prevent flow in either direction, and therefore will not interfere with diversions from the Toe Drain.

Boat ramps will be installed upstream and downstream of the structure for access to the Toe Drain by boats used in the study, but access to the levee will continue to be restricted to prevent public use.

### When and Where?

The resistance board weir will be temporarily installed in the Toe Drain approximately two miles south of Interstate 80. Construction will begin in September 2003, and the weir will be removed approximately three years later.

#### Whom to contact.

For further information, please contact Roger Churchwell, Chief, Fish Facilities Section, Department of Water Resources at rchurchw@water.ca.gov or (916) 227-7546.

Participant Question: The design of the resistance board weir appears to be relatively high in terms of water levels for this time of year. Will the weir hold water 5-feet higher than it already is?

Answer No

Participant Question: Flows in the Toe Drain are from the North. Will there be more water backed up to the north?

*Answer*: The water in the Toe Drain shouldn't back up because the resistance board weir will be lower than Lisbon Weir.

Participant Question: Are you putting this in the Toe Drain for convenience or for application in Bypass?

Answer: The weir will be used as a study site and so the location in the Toe Drain is for convenience.

Participant Question: The weir will be hinged at the bottom, but is it hinged for both directions?

*Answer*: No the weir will only be hinged for one direction of flow. The weir will be porous due to the PVC pipe being spaced one inch apart in order to not impede flow.

Participant Question: Is someone watching the fish 24 hours a day?

*Answer*: No, but there will be someone observing during some evenings and nights. The anticipated study times are slated for November through March. During other times of the year the weir will be pulled out.

The study will be looking for the behavior of the fish around the structure but not necessarily the numbers of fish. Fish will be radio tagged with a new technology of duel frequency identification sonar that will work through turbid water.

*Participant Question*: On the surface it appears DWR is replicating work already done at the Montezuma Sough in Suisun Marsh. Why is DWR building a structure in the Bypass when there is one in the Montezuma Slough?

Answer: DWR biologists recommended this area as favorable to study fish.

Participant Question: Given that the PVC pickets occur every other inch, that means that one half of the total surface area of the proposed weir is still an impediment to water flow. Aren't the pipes going to restrict the flow of water, causing a back up of water?

Answer: High flows will push the gate down which will allow water to flow over the weir without backing up water.

Participant Question: During high water, the flows are very high and bring with it large trees and other objects. Aren't these things likely to either tear out the structure or impede flow by blocking the structure?

Answer: This structure was looked at because it has been used in areas where debris has been an issue.

Participant Question: Have any provisions been made for people who navigate the Toe Drain?

Answer: The chute is 8 feet wide and shouldn't cause an issue.

Dave Ceppos adjourned the meeting.