

**YOLO BYPASS MANAGEMENT STRATEGY
STAKEHOLDERS WORKING GROUP MEETING NO. 13**

***DRAFT*
MEETING MINUTES**

MEETING DATE: February 2, 2001

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

IN ATTENDANCE: Christy Barton, Yolo County Flood Control and WCD
Regina Cherovsky, Conaway Ranch and Reclamation District 2035
Bob Childs, U.S. Army Corps of Engineers (USACE)
Lori Clamurro, Delta Protection Commission
Mike Egan, Yolo Flyway
Denny Eickmeyer, Loose Goose Duck Club and Yolo Wings
Linda Fiack, Yolo County Planning
Sue Fry, USACE
Merritt Rice, USACE
Chris Fulster, Jr., Glide In Ranch
Bill Harrell, California Department of Water Resources (DWR)
Tom Harvey, U.S. Fish and Wildlife Service (USFWS)
Mark Hennelly, California Waterfowl Association
Butch Hodgkins, Sacramento Area Flood Control Agency (SAFCA)
Robin Kulakow, Yolo Basin Foundation
Wayne Little, Dawson Duck Club
Rick Martinez, Martinez Bros. Farming
Duncan McCormack, Yolo Ranch
Duncan McCormack III, Yolo Ranch
Mike Mirmazahert, DWR
Selby Mohr, Mound Farms
John Mohr, Mound Farms
Gary Moody, Yolo Wings
Dennis Murphy, Murphy Farms
Sally Negroni, Natural Resource Conservation Service (NRCS)
Jack Palmer, H-Pond Ranch
Steve Patek, City of West Sacramento
Ricardo Pineda, DWR

Caroline Quinn, City of West Sacramento
Greg Schmid, Los Rios Farms
Elizabeth Soderstrom, Natural Heritage Institute
Ted Sommer, DWR
Jim Staker, Reclamation District 2035
Ron Tadlock, Tadlock Farms
Ray Thompson, Sky Rakers Duck Club
Ed Towne, Bull Sprig Outing
Rod Williams, Yolo Links
Gus Yates, Hydrologist
Dave Ceppos, Jones & Stokes
Jennifer Stock, Jones & Stokes

NEXT MEETING: **The next meeting of the Working Group has not been scheduled. Working Group participants will be notified at a later date regarding the meeting date and agenda.**

ACTION ITEMS

1. Jones & Stokes will complete the interim final Management Strategy document and mail it to the Working Group for their final input.
2. Jones & Stokes will deliver to the Working Group the Reclamation Board regulations that were adopted in 1996 regarding land use in the Yolo Bypass.
3. Jones & Stokes and the Yolo Basin Foundation will assist the Working Group in writing a response to the USFWS regarding the January 12, 2001 Federal Register discussion of the relationship between the Yolo Bypass and Sacramento Splittail (see attached).
4. Jones & Stokes will give the Working Group contact database to the USACE Sacramento and San Joaquin Comprehensive Study (Comprehensive Study) team to ensure that the Working Group receives future Comprehensive Study information.
5. Jones & Stokes will identify the point of contact and mailing list for Sacramento County projects, so the Working Group can stay informed about new developments taking place in Sacramento County.

SUMMARY OF MEETING

Introduction

Mr. Ceppos began the meeting by welcoming the group. He asked if there were any changes or additions to the December 15, 2000 meeting minutes; Mr. Selby Mohr handed in comments on the minutes that needed clarification. The first paragraph on page 6 will be changed to read as follows:

Mr. Ceppos reminded the group that there is a difference between capacity and flood risk. Capacity can stay the same, while risk can increase. Depending on location within the Bypass and the scale of a flood event, a landowner may or may not experience inundation. For example, a 10-year flood event may only inundate certain parts of the Bypass, while other areas experience no inundation at all. However, with a 100-year flood event everyone in the Bypass will be flooded; this event will result in the maximum height flood waters are ever expected to reach. A 100-year flood means that in any given year there is a 1 in 100, or 1%, chance of a flood of a specific size. There was not a lot of flood data when the Bypass was built. Therefore, since more data has been gathered since the 1950's, what was thought to be a 100-year flood prior to then has changed. There are also global climate trends that can act to skew data. So, with more data and a better understanding of data there is a more accurate understanding of what a 100-year flood event actually is. As a result, the historical design of the Bypass does not necessarily accommodate a 100-year flood event.

With this change, the December meeting minutes were adopted as final.

Attendees of the meeting introduced themselves. Mr. Ceppos then introduced Ms. Sue Fry from the USACE to discuss the Comprehensive Study.

Sacramento and San Joaquin Comprehensive Study

Ms. Fry explained that the Comprehensive Study's mission is to "develop a system-wide comprehensive flood management plan for the Central Valley to reduce flood damage and integrate ecosystem restoration." The study focuses on Hydrologic and Hydraulic Analysis, Geographic Information Systems (GIS) database and mapping, Riparian and Wetland Resources Inventory, Flood Damage Analysis, Ecosystem Function Model Design, policy and institutional issues and constraints, plan formulation, and outreach. Ms. Fry introduced Mr. Merritt Rice, also from the USACE, to describe each focus.

Mr. Rice explained that Hydrologic and Hydraulic Analysis of a system involves looking at the synthetic hydrology and reservoir operations to complete a hydraulic model of the system. Synthetic hydrology uses historical storm and natural flow data to determine the total volume and spatial distribution of water to create a hydrograph of unregulated flows which simulates the input of water into a reservoir. The unregulated hydrograph is then used to do reservoir operations modeling. Reservoir operations modeling is used to simulate reservoir conditions, reservoir/river system relationships, flood flows, flow frequencies, reoperation scenarios, and ecosystem restoration opportunities. The output data from reservoir operations modeling from all the reservoirs in the system are then plugged into a hydraulic model. The hydraulic UNET and FLO-2D models are being used for the Comprehensive Study. The UNET model is used to determine river flow routing by looking at river conveyance, transient storage, and levee conditions/alterations, and by then assessing these conditions under different flood management system capacity scenarios. The FLO-2D model is used to assess different levels of levee failure and subsequent flows through a flood plain for a specific scenario. The end result of this system analysis is an overall prediction of what could occur in a system in a given natural event such as flood or drought conditions.

Mr. Rice continued that, with this information, different scenarios can be looked at to investigate and evaluate areas of importance within a system, such as levee integrity and composite inundation analyses. Levee integrity is largely a function of strength. Weak levees are usually not engineered and are made mostly of sand, while strong levees are highly engineered and are made of clay. Strong levees usually do not fail until water spills over the top and erodes the backside of the levee.

Composite inundation analyses look at where different storm centers could occur and how such a storm would affect other areas in the river system. The result of this is a preliminary mapping of the composite inundation areas for the Sacramento and San Joaquin River Basins. These maps can be used to determine and designate areas for floodways and flood control.

Most of this mapping is done using GIS. GIS has also been used to map baseline topography, land use, historically flooded areas, wetland and riparian resources inventory, and other data to create an overlay system. This overlay system can help planners determine areas that would be supported and benefitted by system elements such as a levee's riparian vegetation, and river bank protection improvements and to come up with alternative plans for providing these system elements. Most of the GIS mapping for the Comprehensive Study is complete.

Mr. Rice explained that Flood Damage Analysis uses the HEC-FDA model that integrates Hydrologic and Hydraulic Analysis and economic data to be an evaluation tool and to aid in the formulation of plans to reduce flood damage. These plans may be both structural (levees) and non-structural. The purpose of a Flood Damage Analysis is to look at populations at risk under different flood depths and conditions which are then associated with other potential risk factors to create a graphic of potential risk areas.

An Ecosystem Functions Model is being created by the Comprehensive Study team using the GIS overlays to evaluate different ecosystem restoration alternatives. These alternatives will be

joined with the rest of the Comprehensive Study findings to produce a feasibility report that the USACE will distribute to Congress, other agencies, and the public.

Mr. Rice explained that the feasibility report will use collected data to formulate alternatives for initial projects. These initial projects will: be complete and separable; compatible with the Comprehensive Study Framework Plan; effectively meet flood damage reduction and ecosystem restoration objectives; and be acceptable to agencies and the local public. These alternatives will be evaluated and then included in the document.

The concept plan strategy is to provide balance by creating a specific level of system performance for flood control and by maximizing habitat values and restoring natural river processes for ecosystem restoration. The initial concept plan is focusing on restoring advertised capacity system-wide (see Attachment A for the Yolo Bypass' advertised capacity), not making conditions worse, and integrating environmental restoration.

Ms. Fry concluded the presentation by saying that the Comprehensive Study team is working to develop plan alternatives. She then asked if there were any questions.

Mr. Martinez asked if prior studies were used to get cross sectional data for the UNET model.

Mr. Rice answered that cross sections were taken from bank to bank and levee-to-levee. The average cross section was taken every 1,000–2,000 feet depending on the area they were looking at.

A Working Group member asked who they could call to find out the relationship between specific levee design levels and levee capacity.

Mr. Rice gave his phone number, which is 916-557-6761.

Mr. Harvey asked if the ecosystem design projects will compliment ongoing ventures of organizations such as CALFED and Central Valley Joint Habitat Venture.

Ms. Fry answered that the Comprehensive Study team is in direct communication with other groups.

Ms. Barton asked if the initial projects take into account the potential comprehensive affects in the Bypass.

Mr. Rice replied that all projects will be complete and separable and they cannot increase negative impacts. He reiterated that this situation is difficult since flood-related issues are so related throughout a given river system.

Mr. Egan asked if the Working Group would have access to the information papers about the initial projects.

Ms. Fry answered that the USACE could send the information papers to the Working Group if the USACE can be given contact information.

The Working Group agreed to release this information to the USACE. If any stakeholder wishes this information to be withheld, they are to contact Jennifer Stock or Dave Ceppos of Jones & Stokes at 916-737-3000 or Robin Kulakow of the Yolo Basin Foundation at 530-756-7248.

Mr. Thompson stated that there is a lot of new development going on in Sacramento, and he is concerned that this is adding to the amount of water entering the Bypass. He asked if the Comprehensive Study team could take an active part in making sure certain restrictions, such as retention ponds, are placed on these new developments.

Mr. Rice replied that local land use restriction is the jurisdiction of cities and counties, and therefore, it is up to them to make restriction changes. The Comprehensive Study defines what increases flooding in the Sacramento and San Joaquin River Basins. A created project resulting from the Comprehensive Study is evaluated and modified to avoid any potential increase in flooding. This information will be distributed to the cities and counties; it is up to these governing bodies to use this information to guide local development restrictions.

Mr. Ceppos asked Mr. Pineda if the Reclamation Board is involved in determining local development restrictions.

Mr. Pineda answered that it is something the Reclamation Board and staff are working on. He stated that staff comments about increased run-off volumes (from proposed projects) contributing to flooding problems are not always addressed by project proponents. He also stated that the Reclamation Board does not regulate such development outside of floodways and the state flood control project..

Mr. Ceppos asked who is the regulatory body that would deal with this issue.

Mr. Pineda responded whoever the lead agency is— the city, county, etc. This issue is a statewide concern of local activities, and the Reclamation Board encourages cities and counties to join the National Flood Insurance Program.

Mr. Dennis Murphy asked if the USACE approved the diversion of water from the City of Winters to Chickahominy Slough and Putah Creek. He pointed out that such a diversion increases flows into the Bypass.

Mr. Rice said that to divert water would require a permit and any project proponent would have to go through the permit process, including a public notification and comment period.

Ms. Barton added that she remembered having seen a notice of it in the newspaper.

Mr. Thompson asked if the Working Group could be put on a contact list to be notified of new developments taking place in Sacramento County.

Mr. Ceppos committed to finding an answer and reporting it to the Working Group.

Mr. Ceppos introduced Mr. Bob Childs, project manager of the Lower American River Project, from the USACE, to present on the proposed Folsom Dam modifications, Lower American River Project, and the related implications to flood flow management in the Yolo Bypass.

Folsom Dam Modifications, Lower American River Project, and the Yolo Bypass

Mr. Childs explained that he has been working on this project since 1986.

The 1999 Water Resources Development Act initiated the Folsom Dam Modification Project that proposes to increase flood control for the City of Sacramento. There have been several plans to accomplish this. The Folsom Dam Raise Plan would increase the holding capacity and enlarge existing outlets on the dam to increase the amount of water that can be held and released during the early stages of a flood event. The dam could potentially be raised from 480 feet to as high as 492 feet. This would allow construction to occur without having to drain the reservoir and rebuild major portions of the dam. If the dam were to be built higher than the proposed maximum 12 feet, there would be two summer seasons without water reserves in the reservoir. The additional 12 feet of height would increase capacity by 10%, holding larger events, while keeping outflows the same. A proposed Stepped Release Plan has been designed to increase the release from the dam from 115,000 cubic feet per second (cfs) to 145,000–180,000 cfs, in large events, with early releases in the beginning stages of these events. At the confluence of the American River and the Sacramento River, this extra flow would split with part of the flow going down the Sacramento River and part of the flow going into the Yolo Bypass. The initial plan alternative is to modify the Sacramento Bypass to accommodate the flow split. The USACE would need to look at new models (UNET, etc.) to determine how to offset impacts. The Yolo Bypass would potentially experience 0.7 foot more water in the Bypass. To accommodate this there could be modifications in the Bypass such as setback levees and modification of flow obstructions. A cost-benefit analysis needs to be completed and all options evaluated before any of these ideas are finalized.

The USACE will develop two alternatives and compile a report and then put it out for public review to get comments on what everyone (local government and the public) would like to do for flood protection for the City of Sacramento. They have not yet arrived at any answers. From an early economic standpoint, raising Folsom Dam seems feasible while the costs of increasing the capacity of the Sacramento Bypass might exceed the benefits.

Mr. Thompson asked if there are many people around the Folsom Reservoir now that would experience a loss due to an increase in the water level.

Mr. Childs responded that there really are not, since it is state-owned land. Also, the reoperation of the dam would not really change summertime flows or water surface elevations. The reoperation would lower the peak and spread it out over a longer period of time.

Mr. Tadlock asked if there could be a third plan to create another dam that would serve to create hydroelectric power (considering the current power crisis), flood control, and recreation.

Mr. Childs said that this is something that individuals or the group would need to take up with local politicians. Washington, D.C. sees Folsom Dam as the only means of flood control for Sacramento.

SAFCA Interest in Yolo Bypass

Mr. Butch Hodgkins of SAFCA elaborated on the topic of another dam. He went to Washington, D.C. in 1994 and 1996 to lobby for the building of Auburn Dam. However, there are two national grass root organizations that are opposed to the dam. Because they are so organized, they've had the ability to call all of the different offices of Congress, while those who support the dam have not mobilized such an effort. In 1994, the Auburn Dam proposal did not get past the floor in the House of Representatives. In 1996, there was a Republican controlled government, and they did not even get to the floor. It is Mr. Hodgkins' opinion that it is a better project, but that the politics in Congress make it impossible to get the proposal passed. SAFCA was formed to assist in political support to build the Auburn Dam. By 1992 the consensus for such a project was minimized. He also pointed out that the best function of Auburn Dam would have been to be a flood control project. Due to flow on the north and middle forks of the American River, it would not have had the capacity to make a significant amount of hydroelectric power.

Mr. Childs said that his report may include a recommendation of need for an upstream reservoir but will not name Auburn as that reservoir.

Mr. Murphy asked if the Port of Sacramento ship channel and levee has increased the amount of water in the Bypass.

Mr. Hodgkins answered that he has never seen any data about that issue, but it is his gut reaction that it probably did minimize the Bypass's capacity.

Mr. Yates asked what level of event would warrant the increase of release from 115,000–145,00 cfs.

Mr. Childs responded that it would be a 50-70 year range.

Mr. Hennelly said that there has not been much new on-stream storage constructed in the last 20 years; it has been mostly off-stream storage. Environmentalists are still opposed to on-stream storage, and CALFED does not call for it in their programmatic documents.

Management Strategy

Mr. Ceppos told the Working Group that the interim final Management Strategy document will go out by the end of February. New comments will be noted in shaded text. All comments have been additive and not conflictive. Some comments were constructively critical, while others said that the project team has done a good job thus far. The interim final document will be the last chance to provide any input. Mailing packets and instructions about how to submit comments will be provided with the document to ensure consistent and timely responses.

Mr. Selby Mohr suggested that Working Group members write a letter telling what they have gained from the group and that they support the efforts of the document or that they do not.

USFWS Splittail Issue

Mr. Ceppos presented recently acquired information regarding USFWS statements in the January 12, 2001 Federal Register regarding Yolo Bypass being a threat to splittail. The register reads that there would need to be 30 days of flooding in the spring, a review of pesticides use, and other requirements. He stated that the formal comment period closes on February 12, 2001.

Mr. Harvey stated that he was very surprised by this, as well. This view of the Yolo Bypass is a minority view within his agency; and he has already weighed in on this with the agency.

Mr. Hennelly said the California Waterfowl Association is writing a letter to show their disapproval of the statements in the Federal Register.

Mr. Martinez asked if Mr. Sommer could make any information he has about his findings on pesticides' effects on splittail available to those interested.

Mr. Sommer said yes, and that he has not found any evidence that pesticides are a problem.

Mr. Staker stated that floods in March and April flush the Bypass, and therefore, pesticides causing any problems for splittail seem ludicrous since the timing is off.

The Working Group agreed that Ms. Cherovsky, Mr. Palmer, and Mr. Martinez would work together to draft up a response to the register on behalf of the Working Group and that Jones & Stokes and the Yolo Basin Foundation would support this effort.

Mr. Staker stressed that the Working Group response letter should be in addition to individual comments.

Mr. Harvey asked if the language in the Federal Register would jeopardize the Management Strategy.

Mr. Ceppos answered that it would not, since the document is addressing many other issues including splittail.

Mr. Ceppos adjourned the meeting at 1:30 p.m.

The Yolo Bypass Working Group

February 12, 2001

Field Supervisor
Sacramento Fish and Wildlife Service office
U.S. Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, CA 95825

Subject: Notice of reopening of comment period on the threatened status of Sacramento splittail. Federal Register: January 12, 2001 (Volume 66, Number 9) and the impact of notice to Yolo Bypass landowners and water users.

The Yolo Bypass Working Group is pleased to provide the U.S. Fish and Wildlife Service (USFWS) comments on the subject matter of the January 12, 2001 Federal Register (Register), regarding the reopening of the comment period on the threatened status of Sacramento splittail (splittail).

The Yolo Bypass Working Group (Working Group) is a collection of over 70 stakeholders directly related to, and affected by activities and management of the Yolo Bypass (Bypass). These stakeholders include landowners and landowner tenants (including agricultural and managed wetlands land and water users), local adjacent governments, and flood management agencies. The Working Group was initiated in 1999 by the Yolo Basin Foundation (Foundation), a non-profit organization dedicated to education about the Bypass, and communication and assessment of issues regarding the Bypass. The Working Group was formed initially to develop a long-range vision of the Bypass. This vision has been captured in the Working Group's draft document *'The Yolo Bypass Management Strategy' (to be completed in February 2001)*. This vision describes the Bypass as a place where agricultural, managed wetlands, and other habitat-based land uses may coexist in a mutually beneficial environment. The goal of the development of the Management Strategy has always focused on providing future interested parties, a locally-driven vision of what the Bypass should and could be. This vision is in the context of the Bypass being a primary flood conveyance facility, and a place where many landowners earn their living.

For the past year and ½, the Working Group has been holding meetings to discuss critical flood control, economic, water management, and habitat related issues. Due to the proposed USFWS North Delta National Wildlife Refuge, staff from the USFWS refuge planning department have regularly attended these meetings. The Working Group is aware that the USFWS is a multi-departmental organization. However, through the efforts of the Foundation and USFWS refuge planning staff, it has been the Working Group's understanding that USFWS regional leadership have been clearly aware of the Working Group's efforts. In that light, the Working Group is particularly displeased with the USFWS language in the January 12, 2001 Register. In summary, the Working Group feels that the USFWS text of the Register:

- C Ignores the fact that existing programs (e.g. CALFED) could improve fish habitat conditions without having to list species as endangered (such listings will cause significant hardship to the flood control functions and farming aspects of the Bypass);
- C Ignores and invalidates the important resource and stakeholder-based planning efforts by the Working Group (and the results of our consultants and regional expert's findings);
- C Ignores the realistic economic needs and conditions of landowners in the Bypass; and
- C Indicates a fundamental lack of understanding of the function, operations, and aquatic ecology of the Bypass.

A more specific analysis of Register text follows.

Text on pages 9 and 13 of the Register refer to "operations" of the flood bypass. As previously stated, this reflects a fundamental lack of understanding of the bypasses. The flood bypasses of the Sacramento River State and Federal Flood Control Project (FCP) are by design, non-operational. With the exception of the Sacramento Weir, all of the flood relief structures (FRS) in the FCP are grade control structures with no operational parts or practices. All FRS in the FCP spill at specific flows in the Sacramento River. To infer that the bypasses are operational and by default could be operated differently, is fundamentally incorrect.

The Working Group has been privileged to have held educational discussions regarding Sacramento River and Delta fisheries with acknowledged specialists such as Ted Sommer of California Department of Water Resources, and Warren Shaul of Jones & Stokes consultants. It is the opinion of the Working Group that the USFWS position regarding the Bypass being a "threat" to splittail is contrary to all of the published literature on splittail and to the opinion of scientific experts. A "threat" by definition (and with regards to affected species) is something that adversely affects that species; if a "threat" is removed, the status of the species improves. It is the understanding of the Working Group that the Bypass (in its current state) is one of the single most important habitats for splittail in the San Francisco Bay- Sacramento/San Joaquin River Delta region.

With regards to information provided to the Working Group by fishery experts, the assertion that the entire Bypass needs to be inundated for 30 continuous days between March and April is erroneous and unfounded. Furthermore, it is detrimental to the economics of the Bypass and in light of the important work being conducted by the Working Group, such a pronouncement is extremely counterproductive to a stakeholder-based vision of the Bypass. The Working Group has been told that controlled inundation of isolated parcels could be a means to provide additional spawning habitat for splittail. This has been, and will be an area of future discussion among landowners that might be willing to be involved in such a conservation endeavor. For the USFWS to suggest that full inundation of the Bypass is the most practical approach to protect this species reflects a lack of scientific basis, a lack of sensitivity to the Working Group's efforts, and a lack of understanding of the importance that Bypass plays on

flood management. It also appears that the USFWS' Bypass inundation proposal would also be detrimental to the state's water supply in "below normal" water years.

Similarly with regard to input from the fishery experts, it is the Working Group's understanding that there is presently no scientific basis for the assessment and regulation of pesticide use. Furthermore, the period of time identified as being critical for splittail spawning is at the end of the wet/flood season. In normal years, the Bypass would have already been inundated periodically by flood flows. Such flows would have flushed any potential residual agricultural amendments downstream, long before the target time frame for spawning. Again, such an assertion reflects a fundamental lack of understanding by the USFWS regarding the function of the Bypass.

Regarding stranding issues in the Bypass, it is the understanding of the Working Group that splittail stranding on floodplains after flood waters recede is unfounded. Studies on the Cosumnes River, Sutter Bypass and Yolo Bypass show that splittail are very effective at emigrating floodplain habitat after flood waters recede.

Lastly, the USFWS position will undoubtedly create critical social setbacks for future restoration activities in the Bypass. The blatant threats of inundation without compensation, and enhanced regulatory burden of pesticide regulation are completely contrary to the consensus-based, resource planning approach of the Working Group. Such language will only cause more distrust and more hesitancy among a group of landowners that are already highly suspicious of the motives and actions of the USFWS within the Bypass. A more appropriate and wise approach for the USFWS would be to wait for the final version of the Yolo Bypass Management Strategy and to then work with stakeholders, rather than against them.

In closing, this letter has been written at the direction and approval of the Yolo Bypass Working Group to formally challenge the validity and logic of the USFWS approach and comments in the January 12, 2001 Register.

cc: Congressman Doug Ose
Senator Dianne Feinstein
Senator Barbara Boxer
Yolo County Supervisor Tom Stallard
Yolo County Supervisor Dave Rosenberg
Yolo County Supervisor Lynell Pollock
Yolo County Supervisor Lois Wolk
Yolo County Supervisor Mike McGowan
Ted Sommer, California Department of Water Resources
Pete Rabbon, General Manager, State Reclamation Board
Robin Kulakow, Yolo Basin Foundation