Yolo Bypass Working Group Meeting Summary
Meeting 50
December 8, 2015

Introductions and Attendance

Rebekah Bergkoetter – CA Dept. Fish and Wildlife (CDFW); Yolo Bypass Wildlife Area (YWA)
Chris Bowles, cbec ecoengineering
Doug Brown – Douglas Environmental
Mike Eakin – CDFW, Water Branch
Henry Estrada – Sac Yolo Mosquito and Vector Control District (SYMVCD)
Judy Fisher – Kueneman Consultancy
Dick Goodell – Glide In Ranch
Mike Hardesty – Reclamation District 2068
Alley Keller – McCord Environmental
Eric Kueneman – Kueneman Consultancy
Mike Lear – Swanston Ranch
Betsy Marchand – Yolo Basin Foundation
Petrea Marchand – Consero Solutions representing Yolo County and Yolo Habitat Conservancy
Stephen McCord – McCord Environmental
Selby Mohr – Mound Farms
Heather Nichols – Yolo County Resource Conservation District (YCRCD)
David Okita – CA Resources Agency, EcoRestore
Martha Ozonoff – Yolo Basin Foundation
Paul Phillips – CA Waterfowl Association
Steven Ramos – SYMVCD
Marty Scholl – SYMVCD
Tom Schene – Tule Ranch
Greg Schmid – Tule Ranch
Jeff Stoddard – CDFW, Manager, YWA
Nicole Velleneuve – CDFW, YWA
Leanne Villa – Yolo Basin Foundation
Tim Washburn – Sacramento Area Flood Control Agency (SAFCA)
Aaron Will – Ducks Unlimited

Integrating flood protection and fisheries habitat improvements

Chris Bowles with cbec engineering has worked in the Bypass for about 15 years. Chris presented a list of recent and ongoing studies/projects in the Bypass and modeling that his company has done to evaluate the outcome of these projects. Modeling showed that west side tributaries provide significant water inundation; more than originally expected.

The National Marine Fisheries Service (NMFS) Biological Opinion requires agencies to maximize floodplain rearing habitat for salmon. To this end, state and federal agencies need to figure out how to get fish onto and off the floodplain. Their initial solution is to maximize inundation while minimizing impacts to landholders. A number of projects are being considered including notching the Fremont Weir

to allow upstream adult fish passage and reduce stranding; improving passage through the toe drain; modifying agricultural crossings in the Tule Canal and Toe Drain.

Chris modeled different size and shaped notches for the Fremont Weir to see how it would affect fish and downstream land uses. State and federal fisheries biologists' assumption is that "more water equals more fish passage," however, this doesn't account for fish behavior. The modeling also showed that the date of closure does not affect the number of fish entering the system but does create a large impact to agriculture. The later the date of closure, the greater the economic impact to farmers. Landowners north of I-80 noted that the Bypass is not a natural system and proposed bladder dams/vertical weirs to manage inundation. These weirs would be operated during non-agricultural operations. More inundation in the north would create little impact to areas south of Interstate 80 because water is held in the north. Results from 2003 supported this (there was more inundation with less water if bladder dams were used). The US Bureau of Reclamation (BOR) wants a more natural system so how do you maximize fish passage in and out of the floodplain. Some farmers are recommending starting with a small notch and then see what happens and increase the size as needed.

The Knights Landing Outfall Gates were retrofitted recently to prevent adult salmon in the Sacramento from entering the Knights Landing Ridgecut and the Colusa Basin Drain. This project was completed quickly due to collaboration.

The Wallace Weir berm structure is old and has to be redone every year. The State is on board with the goal to reconstruct the structure next year to provide benefit to land owners. The Biological Opinion "team" is on also on board as this will block fish passage up the Colusa Drain, will not alter existing water operations of the weir, will improve agricultural water delivery, and will not increase flood risk.

The final project discussed was the Elkhorn Basin widening in the northern and southern portions of the Bypass north of the Sacramento Weir. The northern widening is looking at a seven-year timeline; the southern portion is 5-7 years. Prior to the construction of the Bypass, the northern Elkhorn area was a low spot with heavy inundation. It was determined that this was a good spot to widen to decrease peak flood stage. This will provide huge benefits for flood protection and relief, floodplain habitat generation, connectivity, and greater late season inundation. There may be potential benefits to agriculture. Components of this project include set backs of agricultural berms, widening the Fremont Weir, and another weir on east side to allow water back into the Bypass.

Mike Hardesty stated that the widening at Elkhorn would be part of multiple projects. Mitigation would be necessary downstream due to an increase of 60,000 cfs entering up north.

Steve McCord mentioned the entrainment of fish migrating downstream. Right now, there is more focus on juveniles getting into Bypass than fish leaving the floodplain. They are tracking fish behavior north of Fremont Weir and the assumption that "more water equals more fish" is being refined. There is a problems with gate sizing – the small size creates water velocities that are too fast. A wider notch in Fremont Weir would allow for increased fish passage.

There was general discussion relating to the closure date of the Fremont Weir notch and how this date will affect landowners. Petrea Marchand stated that March 15 seems to be the more accepted end date

for all parties. Models are improving and state and federal agencies are respecting local input. Robin Kulakow mentioned that Yolo County has advocated for local stakeholders and the wetlands

Drainage and infrastructure improvements

Petrea outlined what Yolo County is doing in the Bypass. Over the past five years, Yolo County met with stakeholders and asked what they would want to see for drainage and infrastructure improvements. In preparation for projects and grants that would be coming, twelve projects were prioritized based on the outcome of meetings with stakeholders. Prop 1 grant funding is being pursued for priority projects. Four grants were pursued to improve the Wildlife Area for wetland management and farming, water supply conveyance, utilize South Davis drain water, and improve public access. One grant written by Ducks Unlimited, Yolo Basin Foundation and Yolo County is for construction funding. The second is a planning grant for ag crossing replacement and/or improvements with rail car bridges. The planning will identify what crossings to focus on and what type of structures to utilize. The third grant is for west side tributary flow monitoring; Department of Water Resources, US Army Corps of Engineers (ACOE) and Yolo County need to identify data gaps. The last grant with Delta Conservancy is to develop more coordination for operations and maintenance associated with changes in flood flows.

There was a brief discussion about water quality and what was being done to study and/or address this issue. Petrea stated that this was for future consideration.

Aaron Will stated that they will be seeking other funding because projects will cost more than the grants provide.

ACOE says that every project will need a 408 permit. The projects will not affect the levee so only district level not Headquarters approval is required. They have started working with ACOE.

EcoRestore

David Okita represents the State's EcoRestore project which was created at the end of April to replace the habitat portions of the Bay Delta Conservation Plan. The plan includes restoring 30,000 acres of delta habitat in the next 3 to 4 years. 17,000 acres is proposed to be restored in the Bypass for floodplain and 9,000 in Cache Slough for tidal and sub-tidal habitat restoration. The State is committed to the projects including addressing local concerns. To accommodate the projects, easements must be changed but the State will not use eminent domain; there are many stakeholders. Most of the projects are in the Delta and Suisun Marsh. The Knights Landing outfall gates project was fast tracked and completed in 2015. The Wallace Weir and Tule Canal Ag crossings will be done in 2016 and the Fremont Weir notch in 2017. The EcoRestore program will also help with the Prop 1 Yolo projects that Petrea presented.

USACOE Sacramento River Flood Control Project Reauthorization

Tim Washburn discussed the Central Valley Flood Protection Plan of 2012 and its reauthorization. Department of Water Resources must increase water conveyance and decrease flood risk by increasing the area of bypasses. The Yolo Bypass is the greatest opportunity in the near term to achieve this end. The new plan must go to the Sacramento Valley Flood Protection Board in 2017. A major component is to increase the diversion capacity in the north section with the Fremont Weir; various options were proposed/discussed by Chris Bowles. If you increase the capacity, however, how do you offset the

increase in water. This can be achieved by setting levees back on the west side and south side in Cache Slough, and notch deep water ship channel. This will lower elevations in the Sacramento River by one foot or more during peak floods.

Tim went on to discuss other issues and potential questions: how do urban benefits affect agriculture, the need to improve levees, and the need for an improved flood wall for Rio Vista. Potential adverse impacts will need to be addressed and public engagement is essential to hone in on alternatives that are agreeable. Tim stressed that coordination was paramount at the local level between SAFCA, counties, reclamation districts, and water agencies to present a united voice to the State. The Central Valley Flood Control Plan reauthorization needs to integrate with State plans. SAFCA is communicating local interests to the State. These interests include: farmers in the north are proposing raising fish and growing rice for economic benefit. The stakeholders in the middle section of the Bypass do not want what happens up north to negatively affect them. In the south (Cache Slough area), tidal marsh habitat and infrastructure could experience problems due to requirements for fish passage. This southern group needs to coalesce. There are unique issues for each area and his group mediates between them and the State.

ACOE requires a 404 permit for any project using public money. SAFCA is working to build a relationship with ACOE to minimize time and costs related to permitting. By building this relationship, the ACOE can use its authority to approve projects regionally, instead of requiring high level ACOE approval. SAFCA is working on an MOA with DWR and ACOE to be at the table and represent local interests.

Selby Mohr stated that in the last 20 years, there has been significant land alteration in the lower Bypass. The alterations have not been properly permitted. He wondered how you can improve flow, particularly at the bottle neck in the lower Bypass, since this is not how the Bypass was originally designed. There was discussion of putting more water in the Ship Channel to increase water conveyance and lower the Sacramento River, but what is practical and equitable.

Betsy Marchand said that we need to speak with one voice at the local level and wanted to know who the leaders were. Tim stated that Yolo County, Solano County, SAFCA, City of West Sacramento are all involved.

Yolo Bypass Wildlife Area

Jeff Stoddard reported that the five-year farm leases are finalized for grazing (Tom Schene) and rice (Jack DeWit). Leases are competitive and handled under contract by YCRCD.

The flood up was delayed this year. This delay required less water but provided more food for waterfowl. The managed areas are 90 percent flooded.

Hunting season for upland birds and water fowl is in full swing. Take numbers are increasing

The Putah Creek realignment project is part of the EcoRestore program. The southern realignment will tie into tidal wetlands. Department of Fish and Wildlife is working with Department of Water Resources who will implement the project plan.