



Meeting Summary

Upper Sacramento Regional Conditions Work Group Meeting #3

September 3, 2009, 9:00 am – 3:15 pm
Location: Colusa Farm Bureau Offices
530 Market Street,
Colusa, CA

WORK GROUP ATTENDANCE:

Name	Organization	Status
John Carlon	River Partners, RHJV	Member
Stuart Edell	Butte County Public Works	Member
Tom Ellis	Sacramento West Side Levee District, Land owners in the Colusa Basin, Member of the Board of Directors of Colusa County Farm Bureau.	Member
Ren Fairbanks	Farming, SRWP, BSAGU	Member
Pete Ghelfi	Sacramento Area Flood Control Association	Member
Les Heringer	Sacramento Valley Landowners Association	Member
Ashley Indrieri	Family Water Alliance	Member
Jason Larrabee	Larrabee Farms, Glenn County	Member
John Linhart	City of Colusa Planning Department	Member
Ryan Luster	The Nature Conservancy	Member
Eugene Jr. Massa	Colusa Basin Drainage District	Member
Jas O'Growney	Tehama County RCD	Member
Ernie Ohlin	Water Resources for Tehama County	Member
Ben Pennock	GCID, Sacramento River Water Contractors, Glenn County Water Advisory Committee, Stony Creek Fan Conjunctive Water Management Group/ Partners. Association with groups: Technical Advisory Committee Representative	Member
David van Rijn	U.S. Army Corps of Engineers	Member
Scott Tucker	RD1500	Alternate
Gary Hester	CA Department of Water Resources	CVFMP Program Manager
Michele Ng	CA Department of Water Resources	CVFPO*
Dan McManus	CA Department of Water Resources	DWR Lead
Scott Rice	CA Department of Water Resources (consultant)	Regional Coordinator
Roger Putty	MWH Americas Inc.	Technical Lead
Erica Bishop	MWH Americas Inc	Technical Team
Dave Ceppos	Center for Collaborative Policy	Facilitator
Ariel Ambruster	Center for Collaborative Policy	Facilitation

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Name	Organization	Status
		Support / Notetaker

*Central Valley Flood Planning Office

Absent:

Patricia Bratcher	California Department of Fish and Game	Member
Leigh W. McDaniel	Glenn County BOS, Nor Cal Water Assn, Tehama Colusa Canal Authority, Colusa Basin Drainage District, Farm Bureau	Member
Max Sakato*	Reclamation District No. 1500 and CCVFCA	Member
Marty Stripling	River Garden Farms Co., Sacramento River Westside Levee District, Reclamation Districts 108 and 787	Member

*Alternate attended in their place

ACTION ITEMS/WORK GROUP HOMEWORK (requested by 9/10/09):

Attached please find a PARTIAL DRAFT text for Section 2.3, **Existing Resources Conditions**. The partial draft section includes **Physical Conditions**, **Infrastructure**, and **Institutional**.

By **September 10**, please review and provide comments on the PARTIAL DRAFT text for Section 2.3 following these guidelines:

- Please focus on errors, omission, redundancy, mischaracterization, and other major issues with the draft, rather than editorial comments.
- Suggested revisions and comments should be captured in track changes.
- Please remember to include your name on the file name.
- Please email your completed reviews to DWR lead Dan McManus (email: mcmanus@water.ca.gov) and facilitation support Ariel Ambruster (aambrust@yahoo.com), or if preferred fax to the attention of technical support Erica Bishop at (916) 924-9102.
- If you think you may not be able to submit your work by this deadline, or if you are not able to get it done at all, please let us know so that we are aware of what to expect.

MEETINGS SCHEDULE:

MEETING #4 HAS BEEN CANCELED.

Meeting #5

Time: 9 a.m. to 4 p.m.
Date: October 5, 2009
Place: TBD

Future Meetings:

- October 15, 2009
- October 29, 2009
- November 19, 2009 (joint meeting with Lower Sacramento Regional Conditions Work Group)
- December 2, 2009
- December 14, 2009

Potential Meeting Locations:

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- Colusa Industrial Park, Colusa
- Colusa Farm Bureau, Colusa
- Blood Source Building, Chico
- Butte County Library, Chico
- Mendocino National Forest Office, Willows
- Bureau of Reclamation Office, Willows
- City or Glenn County Offices, Willows
- City Offices, Colusa

MEETING OVERVIEW:

MEETING OBJECTIVES:

The goal for Meeting #3 was to introduce and establish a shared understanding of:

1. Respond to issues raised in Meeting #2 (including coordination among the regions)
2. Refine Drivers and Challenges & consider implications for the Plan
3. Complete first round discussion on the Regional Description
4. Confirmed categories of Problems and key problem elements
5. Began generating content for Problem Statements and consider sample opportunity statements

SUMMARY:

Welcome and Greetings

Dan McManus, DWR Lead, and meeting facilitator Dave Ceppos welcomed the meeting participants and led introductions. Dan McManus reviewed activities at Meeting #2, the overall scope and direction of the project, and went over the day's agenda.

Q: We are supposed to be limited to 16 hours per month – where do homework hours fit in?

A: We will talk about schedule. We will try to keep it in mind and keep to the hours we promised.

Q: Are you compiling the draft as we go?

A: Yes.

Q: Is the only place to comment via the homework? I have a concern about how the input is captured and how to respond to that; and the demands on time. Please make clear if the only way you are capturing input is through e-mail responses. Also, it's unclear when input has been read and/or incorporated into documents.

A: We are trying to improve the process and are talking about it as a team. Red flagged items can be brought up at meetings. If we hand out revised documents in track changes, it is hard to describe each of the edits. Input is read, incorporated and included in the next version. Should we be spending more time going over our edits at the meetings? We could go over that in more detail. Between the last meeting and this one, there was no time for turnaround to incorporate homework and other input.

Comment: it is most helpful to be able to see and read the revised versions prior to the meeting, for discussion.

Answer: One proposal might be to list comments and say, "Here is what we did to respond to this comment, or why we didn't make changes." We want to make sure we capture your comments, and one way is to have you review after we have revised.

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Comment: Consider the mechanics of the number of e-mails. Perhaps drafts could be placed on the website, and could be color-coded. It could be a living document.

Q: Are we charged with editing the entire document?

A: Yes, with your regional cap on.

Comment: There is too much material, too many e-mails – too much work.

Answer: We understand. We could discuss the way meetings are conducted: do you prefer time spent on exercises, brainstorming, and input, versus time spent discussing comments? We can discuss this at the end of the day.

Opening Remarks

Gary Hester welcomed the group and provided opening remarks. He discussed the startup of the topic workgroups. Because there is a lot of good information coming in to process, which requires time to respond to, there is a need for a strategic pause. It has been decided to cancel Meeting #4. This will help make sure the Regional Conditions Summary Report can take advantage of all of the participation and input. In response to the concern about 16 hours a month of work: this was an approximation, and the team is trying to shorten work group meetings in order to keep to that target. Each of the work groups has commented on the issue of tracking input. This is something that will be revisited. This work group has had tremendous attendance and engagement.

- This Friday the Central Valley Flood Board took action that will allow the Army Corps of Engineers to participate in this process.
- An agricultural subcommittee will be developed. DWR is working with the Central Valley Flood Control Association to get representation across the board.
- An updated glossary is in the packet; consider it a first revised draft

Comment: The farm bureaus can help with the agricultural subcommittee membership.

Q: Is this the last chance to comment on chapters 1 and 2?

A: We will adjust the schedule as needed to accommodate work that was to have occurred at Meeting #4.

Comment: There are different definitions for some terms, federal versus Regional Condition Work Group definitions. Those differences should be spelled out in the glossary.

Comment: Keep FEMA in mind in regards to definitions and content (in order to qualify for potential funding opportunities).

Comment: In regards to SB5 and AB152 boundary issues, the process needs to be cognizant of the intent of the legislation, and the impacts on locals: general plans and local responsibility in regards to levee maintenance.

Comment: Army Corps participation in this process can help with federal funding.

Dan McManus distributed the current schedule for the four regional conditions work groups and the topic workgroups.

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Meeting Summary

Work Group Members were asked if they would be comfortable if the first draft of the meeting summary was made available for other workgroups on the CVFMP website. Participants agreed, with the following caveats:

- The draft summary will include a disclaimer that it is a draft and could change, and it will include a 'draft' watermark
- It will be posted as a PDF
- The final version will be made available subsequently

Review and Confirm Final Draft Chapter 1 & 2 Outline

Roger Putty reviewed the current draft detailed outline for Chapter 1 and Chapter 2.

The following comments were received on the draft Detailed Outline for Chapter 2:

- Get better clarity on what is meant by local/non-SPFC facilities
- How is the manner with which information is being collected and organized helping to achieve the requirements of SB5?
- Modeling/mapping by FEMA is not identifying opportunities to reconnect historic floodplain features
- Will the Executive Summary include recommendations? This should be included in the outline (or described that they will be found elsewhere).
- Page 1:
 - Breakout into Sacramento River subbasins? Such as Butte, Colusa, and Sutter subbasins.
 - Describe the history of their (subbasin) development
 - More emphasis on structures and overflow areas
- There are a number of gradient restoration projects - - include these
- Page 2 under 2.3.1: How is floodplain defined – FEMA, etc.? It changes from map to map.
- "Small and legacy communities" should be changed to rural.
- Don't abbreviate items, write them out.

Review and Outline Next Steps on Draft History General Description

Roger Putty outlined next steps on the history section of the Study Area Description. Comments are being incorporated. Additional comments from this meeting will be taken into consideration.

The following comments were received:

- There should be the same level of detail for all areas
- All of us get better together – rural as well as urban areas
- Include Tisdale Bypass where references are made to bypasses
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Chapter 2, Priority Challenges and Drivers (Worksheet 7)

Roger Putty introduced the activity. A driver is defined as an external factor that could influence planning out to the year 2050. We want to know how drivers may change the landscape of resource conditions, so flood management can take them into account. For this small group activity, the goal is to discuss how drivers affect certain parts of the region and certain resources, and the trends associated with these drivers.

Question: How Does This Driver Impact Flood Management?

Question: Rate or Trend of Change? (This characteristic is captured in parentheses for each item.)

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Drivers Not Paired with a Category

Overlap and complexity of multi-agency (DWR/Army Corps/FEMA) oversight and compliance makes it difficult to know who to answer to and stay in compliance. It takes longer/costs more to build, maintain levees, risks and costs increase.

Increase in vegetation in flooded facilities (between levees) increases roughness, decreases efficiency of flow management. However – conservation advocates comply with the same modeling requirements that others do to assess potential impacts.

Changes in economy influence agricultural land decisions that can result in change of land use to habitat when lands become lower in value, less productive and/or more at risk (i.e., decreases in commodities prices, uncertainty of flood events, O&M costs post-flood).

1. Type and Location of Development (Residential; Agricultural; Industrial)

Agricultural/environmental land use: Upper Sacramento continues to be mitigation bank for other regions

Residential/industrial: runoff rates, infiltration.

Perception of public safety – level of acceptance of standard of protection.

Development is likely to occur around existing urban areas. (Increase.)

A number of communities are likely to get to a population of 10,000: Colusa, Williams, Orland, Willows, Tehama, Red Bluff, I-5 corridor. (Increasing).

Agricultural open farming will transition to permanent planting (orchards), limiting flood management options. This will increase loss, liability/damage, and roughness. (Ongoing, will continue; increasing).

Increasing ranchette development leading to more difficult flood management.

Higher percentage of industrial versus agriculture – agriculture-based industry.

Development in the foothills: Eastside, not West side, leading to increasing pressure to existing flood control systems. (Increasing.)

A slight decrease in agricultural acreage, and a slight increase in value.

Environmental land use:

- The federal government is increasing national wildlife refuge growth by 30%
- Duck club land ownership is increasing
- There are increasing sales of agricultural land to environmental use. (Increasing).

This trend is causing challenges to flood management, and providing opportunities for flood management

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Driver for these trends: economic. (Increasing.) The economic issue is lack of diversity in the region, too much dependence on agriculture.

Another driver for the sales of agricultural to environmental lands is flooding – sales happen after agricultural land has been flooded out. *(This item could be visited as a problem statement for chapter 3.)*

Existing and new development increases the volume and rate of runoff. (Cyclical, going up.)

Agriculture/rice flooded for rice decomposition decreases absorptive capacity early in the flood season, decreases storage capacity. (Increased to stable.)

Flood up for wetland habitat. Public and private absorbs flood capacity – some flood up is compliance with conservation easements. (Stable.)

Agricultural leveling has improved water management efficiency but increased runoff. (Stable, second small impact.)

Change of foothill rangeland to orchards with increased land manipulation = increased runoff. (Increase.)

Development (built) in floodplains requires raised footprint (islands) changing flow patterns (channelization, velocity). (Increase.)

Highest valley ground is already developed. New valley development is pushed into historic floodplain. (Increase.) → Driver 5 – this growth is pushed to valley floor/floodplain because of available water supply. Legislative mandate to prove water supply. (Increase.)

Potential overdraft without proper recharge of aquifers may be causing subsidence in some areas. Groundwater use is increasing due to scarcity, competing regulations (environment), water delivery policies, etc. and agricultural/or urban development.

2. Change in the Number of People Living in the Floodplain

Growth rate flat/slightly up.

The fairly flat growth rate is compatible with flood management: it is possible to plan before changes happen; it allows for additional flood management options.

The population of Redding is increasing, increasing flood risk from the Shasta dam system.

Overarching driver: new legislation is controlling land use, water use, water delivery, general plans, demographics, liability. Rate of this has increased. Quality has decreased due to reactive nature of legislative creation, term limits (loss of institutional memory and party ideals/interests), fiscal constraints and accountability.

3. Climate Change (Sea Level Rise; Runoff Patterns; Temperature)

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Snow-based runoff may change to event-based runoff. Overwhelm volume storage, seasonal variation of when runoff occurs. (Increase.)

More volatility of when, where, how much – separate.

Runoff volatility (hydrologic) impact will change sediment transport and deposition (presumed increase)

Volatility may mean bigger floods, longer droughts. This region is more directly affected by the operations/mods of the two biggest reservoirs in the state (i.e., flows in the Sacramento, Feather, etc.).

More localized flooding, more overtopping, levee instability in the region. (Presumed increase) ← Linked to conflicts in legislation.

Increased water temperature may exceed regulations. May require more reservoir releases to maintain target temperatures. ← Linked to use of groundwater due to regulation-based scarcity. (Increase.)

4. Environmental Regulations (ESA, CEQA/NEPA, AB 32)

General conflict between support of environmental resources and flood control principles due to location, vegetation on levees, vegetation and flood channels. Some public/private/NGO landowners comply and some do not comply with vegetation management practices to limit such impacts. (Increasing.)

Habitat requirements sometimes conflict with flood management (e.g., elderberry and VELB). (Increase.)

Environmental regulations increase the cost of and delay flood system operation and maintenance and improvements. (Increase.)

ESA is requiring changes in river flows which is changing/increasing bank erosion and limits operation and maintenance windows. (Increasing.)

Increase in habitat development within flood facilities posing impacts to flow efficiency and capacity. (Increase.)

5. Water Supply (Reservoir Operations; Development; Subsidence; Conveyance)

Reservoir operations need to respond to it (as well as climate change). This leads to a decreased flood pool (decreasing).

There is increasing water supply for use (multipurpose storage) = benefits for flood control.

Desalination might lighten the demand for Northern California water, which could help the flood control system.

The group disagreed on the chance of additional new reservoirs.

Subsidence (increasing).

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Increasing groundwater use (as agriculture shifts to orchards), causing an increased impact on flood management if there is subsidence (should look at offstream and transitory storage, demand recharge areas)

Technological development: rice varieties, drip irrigation, etc. could decrease water supply demand

Decreasing (water supply) reliability could lead to increasing conflict between water supply and flood control.

Increasing (water) exports could lead to impacts on flood management. Users in export areas do not shoulder any flood management risk. (*Solution: integrated water supply coordination*)

Conveyance – change in operation (Delta, CVPIA) results in higher river levels which has increased the cost of pumping drainage flows for northern reclamation districts.

Existing conveyance (Shasta dam and the new modified hydrograph) leads to ESA issues – (*this could be a chapter 3 problem statement.*) (Continuing).

Seasonal high river levels lead to levee erosion. (Continuing). The group disagreed on the cause of this: rice farming, or environmental.

6. Water Quality (Temperatures; Contaminants Transport)

Conveyance for temperatures could impact levees

Increasing temperature will be the biggest factor (climate change, etc.).

Diazinon will continue to be a problem.

The trend to keep runoff from river (leads to benefits).

7. Available Public Funding for Needed Improvement (Deferred O&M, Viability of Future Investments)

Urban areas (increasing).

Rural (decreasing). Impact: inability to produce cost share to rural areas for flood control, which leads to more problems.

Now: a funding shortfall, causing a depletion in special district and county budgets.

There is no sound financial model to support rural areas flood control systems – cost-benefit issue. (Trend is worsening).

O&M are not sufficiently provided for (*chapter 3, possible solutions could be identified*).

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Prop 218 (*chapter 3, possible solutions could be identified*).

Federal, state (A.B. 1147) cost share – trend is from 100% to 75/25%, and continuing.

Proposition 1E, proposition 84 – reflect a rural/urban disconnect in regards to legislative goals (reflecting urban goals)

The public disconnect on paying for flood control (versus cable TV).

7. State (and others) does not have the resources to comply with regulations, and manage abundant vegetation. (Increase.)

Problems and Opportunities (Worksheet 8)

Roger Putty introduced the section, reviewing portions of a PowerPoint included in the packet on problem statements. Small groups then developed a list of problems in specific categories.

Question: What Problems and Opportunities Do You Suggest for Each of the Categories and Sub-Categories as It Relates to Your Region?

Some items were placed under multiple categories.

Flood System Performance

3Bs overflow weir is not part of the FCP. It is an asset in the system. First flood creates head cutting/filling Butte Basin earlier than by intent/design.

Colusa Basin drainage faces similar condition of capacity to drain through Ridge Cut or Sacramento discharge point.

Woodson Bridge Road closure. Flows exceed river due to limited channel capacity and the lack of project levee. Results in impacts to emergency services. Road elevation is poorly designed/insufficient to flood impacts.

Colusa Basin Drain. Built to reclaim land in spring and summer. Not built as a flood conveyance facility.

State Highway 162 from Willows East city boundary to County Road P (milepost 7). Highway too low. Maintenance and design problem of Walker and Willow Creek undercrossing, and large berm on south edge of highway holds and channelizes water on the highway. (This problem potentially applies to another category: System Maintenance and Repairs)

Town of Tehama floods during high flows. The area is more low-lying. May be influenced by railroad tracks.

Above Orland water coming down a tributary of Stony Creek flows into the TC Canal. This in turn flows downstream in TC Canal and is released into the Willow Creek. These flows over flow and impact Willows, I-5, Hwy. 162. Moving water from one watershed with capacity to another without capacity. (This problem potentially applies to other categories: Policy and Institutional, Water Supply)

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System Maintenance and Repairs

North of Williams, residential development raised ground surface, forced runoff into Salt Creek, Freshwater Creek (Williams north drainage channels), which flow to I-5 under crossing, which is not maintained. Backs up into sewage treatment plant.

Hamilton City J. levee has eroded away. It has been used by Army Corps/DWR as an integral part, but is not part of the flood control project. It poses risk to Hamilton City. Also a result of poor planning decisions upstream/downstream and analysis/paralysis to make a change. (This problem potentially applies to another category: Policy and Institutional)

SacBank emphasis on bank stabilization is limiting opportunities to restore or maintain natural fluvial processes. (This problem potentially applies to another category: Habitat Quality)

Reservoir Operation

The potential of a Peripheral Canal may create conflicts between current Reservoir operations (surface elevations and flow releases) with future needs for facility maintenance, facility capacity, other.

Habitat Quality, Quantity, and Connectivity

Policy and Institutional

Lack of comprehensive regional plan and system design to deal with current day problems and needs (e.g., flood control project built for flushing flows of mining debris, old problem, not current problem). Purposes are being served by facilities that were never intended to do so.

State flow and vegetation management easements are not maintained and enforced in the Sutter Bypass by DWR and CVFPB.

In the context of climate change projections, the lack of stairstep storage in the foothills loses the opportunity to maximize multiple benefits from a changed hydrologic system. (This problem potentially applies to another category: Water Supply)

Water Supply (Shared Facilities, Groundwater Recharge)

Level of Protection

Lack of uniform protection throughout floodway causes a number of problems

Rural areas have no state identified flood protection

The cost to meet the level of protection and O&M

Cities under 10,000 population are not covered by urban standards

Small towns can't subdivide after 2012

57 level profile – and design standard for levees – is used as gospel

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Levee geometry – height, stability – is one standard for all levees, agricultural and urban.

Seepage, underseepage

Disincentive to test levees

Conflict between federal, state, and natural resources over flood policies – what is the adequate level of protection? (100 versus 200).

Funding for level of protection is unequal, urban versus rural – "We will all get better together."

Land Use

Existence/development of cities in floodplains

Don't build over recharge areas

Emergency Response

Lack of money, equipment, personnel

Lack of well-planned response

Lack of evacuation plans

Lack of un-flooded escape routes

Post-Flood Recovery

Sediment accumulation from weirs and floodplain due to lack of maintenance, impacting flood system performance.

- Plan needed to get back (to pre-accumulation conditions)
- Plan needed for region/area

Lack of post-flood recovery plan for rural areas outside flood system

- In nonemergency situations
- Agriculture in the floodway is at a competitive disadvantage

It is difficult to identify a cause post-flood in order to qualify for federal funds

- "Lack of maintenance" does not qualify for funds

Need plan for financial assistance in/outside the levees, floodplain

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Lack of non-emergency funding for upland areas to clear creeks

Water Quality

Recalled from Meeting #2:

- Northern part of Williams – risk to water quality
- Hamilton City – sewage treatment plant overflows

Pesticides and fertilizer applied in the floodway and via runoff have local, regional and wildlife impacts. They impact storage in high flood events.

Urban pesticide and chemical load during flooding.

**Is it a problem? It is diluted during a flood event. Conclusion: Those items above are probably not major issues. The largest water quality issue might be impacts to domestic and agricultural wells during flooding – site-specific and temporary. The problem here may be flooding.

Homework Overview, Next Steps, Action Items, Meeting Recap

Tentative future Work Group meeting dates were confirmed as final.

Also, work group members expressed a preference for meetings in the Colusa/Willows region.