



# MEETING NOTES

<b>Project Name:</b>	<u>MUSR RFMP</u>	<b>Date:</b>	<u>1/14/2014</u>
<b>Meeting Subject:</b>	<u>Urban Areas Workgroup</u>	<b>Project No.:</b>	<u></u>
<b>Location:</b>	<u>Chico Masonic Center, Chico, CA</u>	<b>Page:</b>	<u>1</u>
<b>Notes by:</b>	<u>Chris Fritz, PBI; Barry O'Regan KSN</u>		

**Attendees:** See attached sign-in sheet \_\_\_\_\_  
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**Notable Discussion Items:**

- 1) Introductions
- 2) Meeting Purpose
- 3) Review RFMP Approach
- 4) Urban Areas Topic Statement
  - It was recommended that the language in the Topic Statement be revised so that the workgroup does not solely focus on SB5 impacts (see attached for revised statement).
- 5) City of Chico Flood Control Issues
  - Post the 200-year SB 1278 Maps to MUSR Website
  - Identified Levee Deficiencies – Not many structural issues
    - i. Confirm with NULE/ULE.
    - ii. The FEMA accreditation package for parts of the Sycamore-Mud Creek levee system was submitted in January of 2011 and approved in May of 2011.
    - iii. There is a “notch in the weir” that hasn’t been seen in quite some time at Big Chico Creek Diversion (Constructed in 1965) due to sediment deposition.
  - Identified Capacity Deficiencies
    - i. During the 1997 event, debris accumulated at both the Big Chico Creek and Lindo Channel inlets, which may have prevented flooding within the City. Big Chico Creek flooded in the 5-mile park area. Flow estimates for Mud Creek at Highway 99 were 15,400 cfs.
    - ii. DWR provided preliminary information regarding AEP flows for the Big Chico Creek system
    - iii. Mud Creek does not have adequate capacity; suffers from sediment buildup (lots at Cohasset Rd.).
    - iv. Storm drains typically have capacity when high flow is observed in the channels (peaks have passed)
    - v. University recently cleared vegetation (arundo) along Big Chico Creek.
    - vi. 100-year floodplains for the Sacramento River backs up to the Mud Creek/Chico Creek confluence.
    - vii. Unwanted (non-native) vegetation exists in Little Chico Creek Diversion; no sediment issues.
  - DWR Hydraulic Modelling of the Chico system
    - Todd Hillaire, DWR, presented preliminary results of DWR’s hydraulic modelling of the Chico system (see attached).



## MEETING NOTES

- Modelling is being used to evaluate if the system can still accommodate the 1957 design flows.
- Preliminary results indicate that for the most part, the system can accommodate 1957 design flows.
- MUSR RFMP will look to incorporate DWR's work into final RFMP

### 6) Potential Solutions

- Non-structural flood management system projects
  - i. ULOP 200-year Strategic Plan
  - ii. Lindo Channel improvements:
    - Clear Vegetation
    - Enhanced maintenance program
    - Revise O&M manual
    - Potential Fish Passage Improvements
  - iii. Enhanced Channel Maintenance Program for Mud and Sycamore Creek
- Structural flood management system projects
  - i. Sycamore Creek Grade Control Structures Pre-Design
  - ii. Sediment Removal at Big Chico Creek Diversion Pool (5-year recurring program)
  - iii. Mud Creek UPRR crossing improvements
  - iv. Detention facility at upstream end of Dry Creek.
  - v. Detention facilities to relieve flows along Rock Creek.
  - vi. Off stream storage near Sheep Hollow Area:
    - Left bank levee is what protects people
    - Right bank levee just crowds water against left levee
    - There is potential to increase capacity here by degrading the right bank levee
    - It was guessed that the inundated area could be increased by about 150 acres

### Action Items:

- Post the Chico SB 1278 Maps to MUSR Website (PBI)
- Revise Topic Statement so that workgroup definition does not solely revolve around SB 5 (PBI)



REGIONAL FLOOD MANAGEMENT PLAN

SIGN-IN SHEET

Urban Areas Workgroup Meeting

Date: January 14, 2014

PRINTED NAME	AGENCY (IF APPLICABLE)	EMAIL	PHONE NUMBER
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## Urban Areas Workgroup

Urban and urbanizing areas are defined as those areas with a population of at least 10,000 (or with plans to reach 10,000 within 10 years). The City of Chico is the only area within the Mid and Upper Sacramento RFMP region that is characterized as 'urban'. In 2007, Senate Bill 5 (SB5) was passed which restricts new development in urban areas unless the area has a 200-Year level of flood protection. Therefore, the Urban Areas Workgroup will primarily focus on the identification of flood related problems and solutions for the City of Chico. The intent of the Urban Areas Workgroup is to help the RFMP team assess flood related impacts for Chico and identify potential projects to address identified impacts.

**DRAFT - DWR**  
**Comparison of Central Valley Hydrology Study and Mud/Big Chico Creek Flood System Capacities**  
(flow, in cubic feet per second)  
1/13/2014

Stream	Location Point	Annual Exceedence Probability <sup>1</sup>					SPFC Design Capacity - 1957 Profile <sup>2</sup>
		0.1 (10-Year)	0.02 (50-Year)	0.01 (100-Year)	0.005 (200-Year)	0.002 (500-Year)	
Big Chico Creek above BCC Gates	12	6,779	10,529	12,232	13,979	16,353	16,000
Downstream end of Sycamore Diversion Channel	11	2,316	4,903	6,076	7,279	9,024	8,500
Confluence of Sycamore Creek and Sycamore Branch	10	3,121	6,056	7,371	8,723	10,652	10,000
Upstream end of Dry Creek levees	9	973	1,386	1,557	1,738	1,980	500
Confluence of Sycamore Creek and Dry Creek	8	3,195	6,160	7,498	8,880	10,848	10,000
Upstream end of Sheep Hallow SPFC levees	7	2,067	2,825	3,152	3,491	3,942	1,400
Confluence of Sheep Hallow and Sycamore Creek	6	3,983	7,274	8,743	10,262	12,406	11,000
Upstream end of Mud Creek SPFC Levees	5	2,235	3,803	4,517	5,242	6,228	5,500
Confluence of Sycamore Creek and Mud Creek	4	4,563	9,191	11,344	13,544	16,566	15,000
Mud Creek downstream of UPRR crossing	3	4,815	9,422	11,619	13,858	16,958	13,000
Confluence of Mud Creek and Rock Creek	2	8,091	14,795	17,816	20,897	25,129	13,000
Immediately upstream of Mud Creek and Big Chico Creek confluence	1	11,390	18,923	22,389	25,959	30,898	13,000

<sup>1</sup>Central Valley Hydrology Study

<sup>2</sup>State Plan of Flood Control facilities are the State-Federal flood control project.