

January 2009 Working Group Meeting

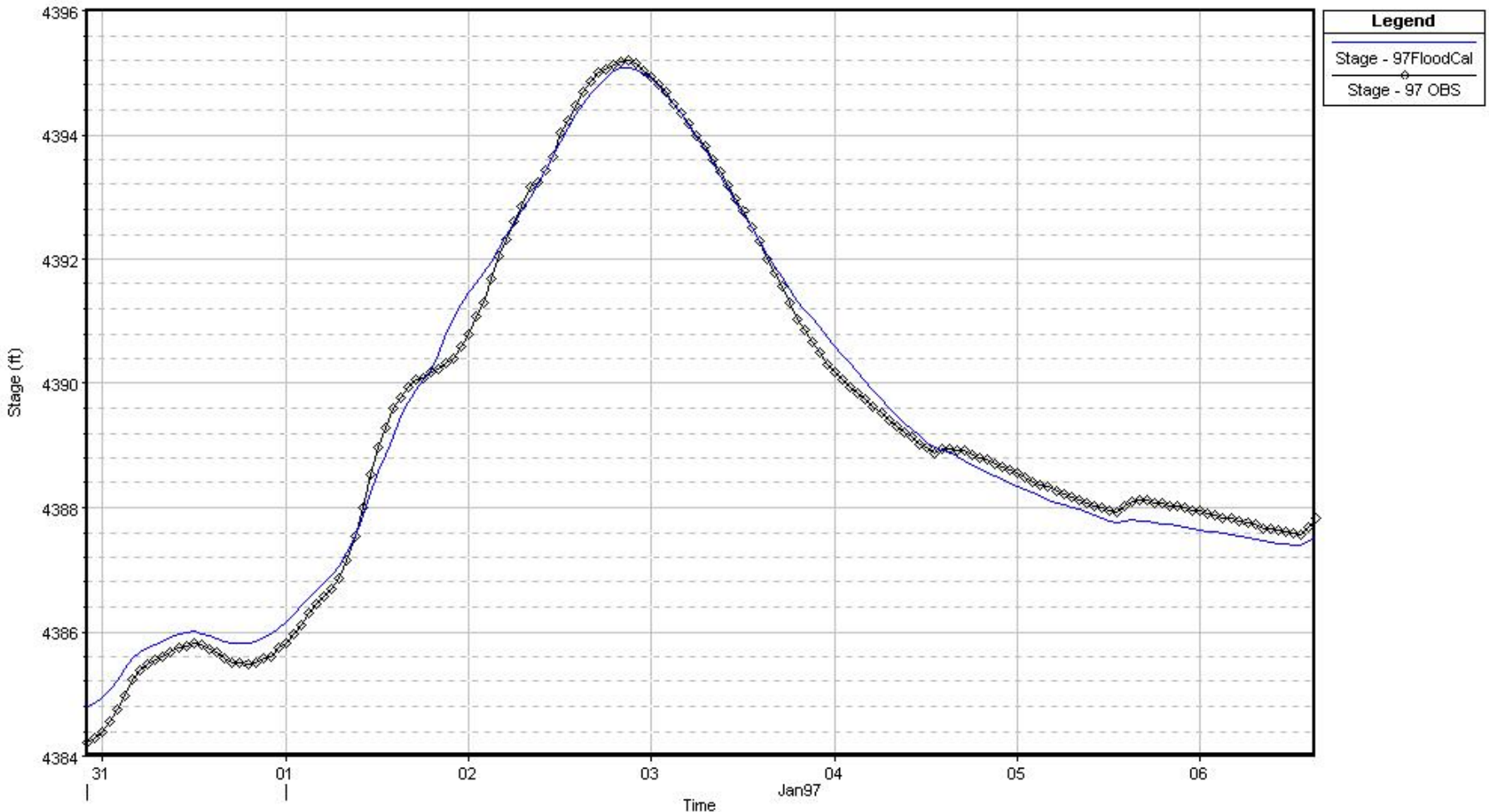
- 1. Evaluation of the effects of the Huffaker Detention Facility on flows at Vista and downstream.**
- 2. Results of the latest hydraulic model runs Done in August 2008**
- 3. Huffaker Detention has no significant effect on flows rates and water surface elevations at Vista**

Results

1-15-03 RWPC
Presentation

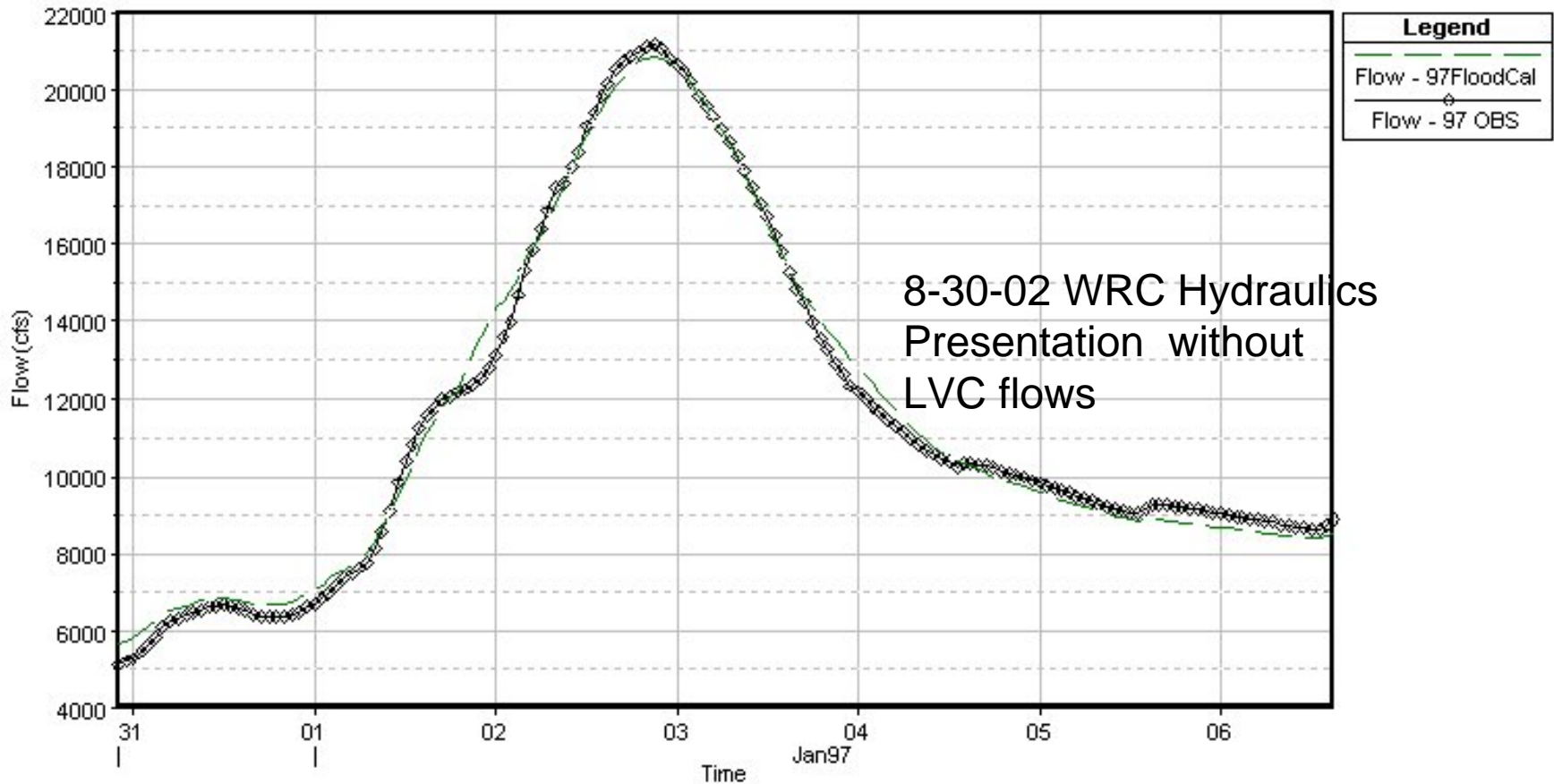
- Excellent Match to Gage Data

Truckee River Project Plan: 97 Flood Calibration - Unsteady Flow
Geom: Existing Conditions Geometry Flow:
River = Truckee Reach = Lower RS = 11496.09 OBS WS Flow



Results matched observed

Truckee River Project Plan: 97 Flood Calibration - Unsteady Flow



Setback Levees & Floodwalls Alternative

- Repair or build walls & levees (2 to 11 feet high), including residential areas
- Water Surface Elevation increases 1.5 feet above 1997 levels
- Downstream flows increase by as much as 4,000 cfs at the peak
- Internal drainage to be determined
- Cost between \$200 - \$235 million
- Local share \$115+/- million

5-12-01 Hydraulic Design Presentation without LVC flows

LEGEND

- TRUCKEE RIVER & STEAMBOAT CREEK
- PRELIMINARY HYDRAULIC MODEL
- PRELIMINARY CHANNEL BENCHING
- 1997 FLOOD BOUNDARY
- FLOW RESTRICTIONS - BRIDGES

0 500 1000 2000 3000 Feet



Existing Conditions Model Results

100-year Event on the Truckee River

Vista Outflow = 19,000 cfs (rev to
20,000 cfs)

117-year Event without Huffaker Detention

Vista Outflow = 23,000 cfs

Peaks from Aug 5-03 WRC NV for Truckee River 100-yr event

Steamboat coincident peak = 4890 cfs

Boynton Slough Coincident peak 1,325 cfs

Truckee at Vista

Truckee At Reno 100-yr = 20700 cfs 121-year (117) 23,000 cfs from 1999
frequency Curve F3 report

Corps Info

Truckee 1999 F3 report Vista 100 = 19,000 cfs

Truckee 2001 Revised by John High USACE = 20,000 cfs Target for model
adjustment for trib flows determination.

August 11, 2008 Model Results

5-year Event with Huffaker Detention

Huffaker Outflow = 484 cfs

Vista Outflow = 1,498 cfs

5-year Event without Huffaker Detention

Huffaker Outflow = 484 cfs

Vista Outflow = 1,544 cfs

August 11, 2008 Model Results

10-year Event with Huffaker Detention

Huffaker Outflow = 690 cfs

Vista Outflow = 8,459 cfs

10-year Event without Huffaker Detention

Huffaker Outflow = 667 cfs

Vista Outflow = 8,515 cfs

August 11, 2008 Model Results

20-year Event with Huffaker Detention

Huffaker Outflow = 1,201 cfs

Vista Outflow = 10,607 cfs

Confluence WSEL = 4389.44

20-year Event without Huffaker Detention

Huffaker Outflow = 1,399 cfs

Vista Outflow = 10,802 cfs

Confluence WSEL = 4389.52

August 11, 2008 Model Results

50-year Event with Huffaker Detention

Huffaker Outflow = 2,508 cfs

Vista Outflow = 16,498 cfs

Confluence WSEL = 4392.53

50-year Event without Huffaker Detention

Huffaker Outflow = 3,014 cfs

Vista Outflow = 16,908 cfs

Confluence WSEL = 4392.67

August 11, 2008 Model Results

100-year Event with Huffaker Detention

Huffaker Outflow = 3,958 cfs

Vista Outflow = 23,907 cfs

Confluence WSEL = 4395.89

100-year Event without Huffaker Detention

Huffaker Outflow = 4,883 cfs

Vista Outflow = 24,210 cfs

Confluence WSEL = 4396.04

August 11, 2008 Model Results

117-year Event with Huffaker Detention

Huffaker Outflow = 4,873 cfs

Vista Outflow = 25,388 cfs

Confluence WSEL = 4397.18

117-year Event without Huffaker Detention

Huffaker Outflow = 5,420 cfs

Vista Outflow = 25,207 cfs

Confluence WSEL = 4397.03

QUESTIONS