

Trip Report for Travel to Review Flooding in Southern Utah Within Salt Lake City HSA From May 24th to May 25th, 2005.

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PURPOSE OF TRIP:

- ❖ To review ongoing flooding in Southern Utah, Great Basin Desert (Beaver River, Sevier River, and Coal Creek); and Colorado Basin (East Fork Virgin River); also
- ❖ To estimate critical stages where needed.

TUESDAY MAY 24TH --- FIELD OBSERVATIONS AND DISCUSSIONS

1) Beaver nr Beaver (BEVU1)

At time of visit (1305) the flow was approximately 1 foot below bank full and 1.5 feet below road surface downstream.

Gage was reading 2.57 feet on 5/24 at 1305.

USGS Webpage reports 2.58 feet at 569 cfs for 1300.

Current rating has 0 flow at 0 feet.

Current bank full stage is 2.5 feet.

Current unofficial flood stage is 3.1 feet.

Suggest new bank full stage of 3.5 feet.

Suggest new minor unofficial flood stage of 4.0 feet

Suggest new moderate unofficial flood stage of 4.5 feet.

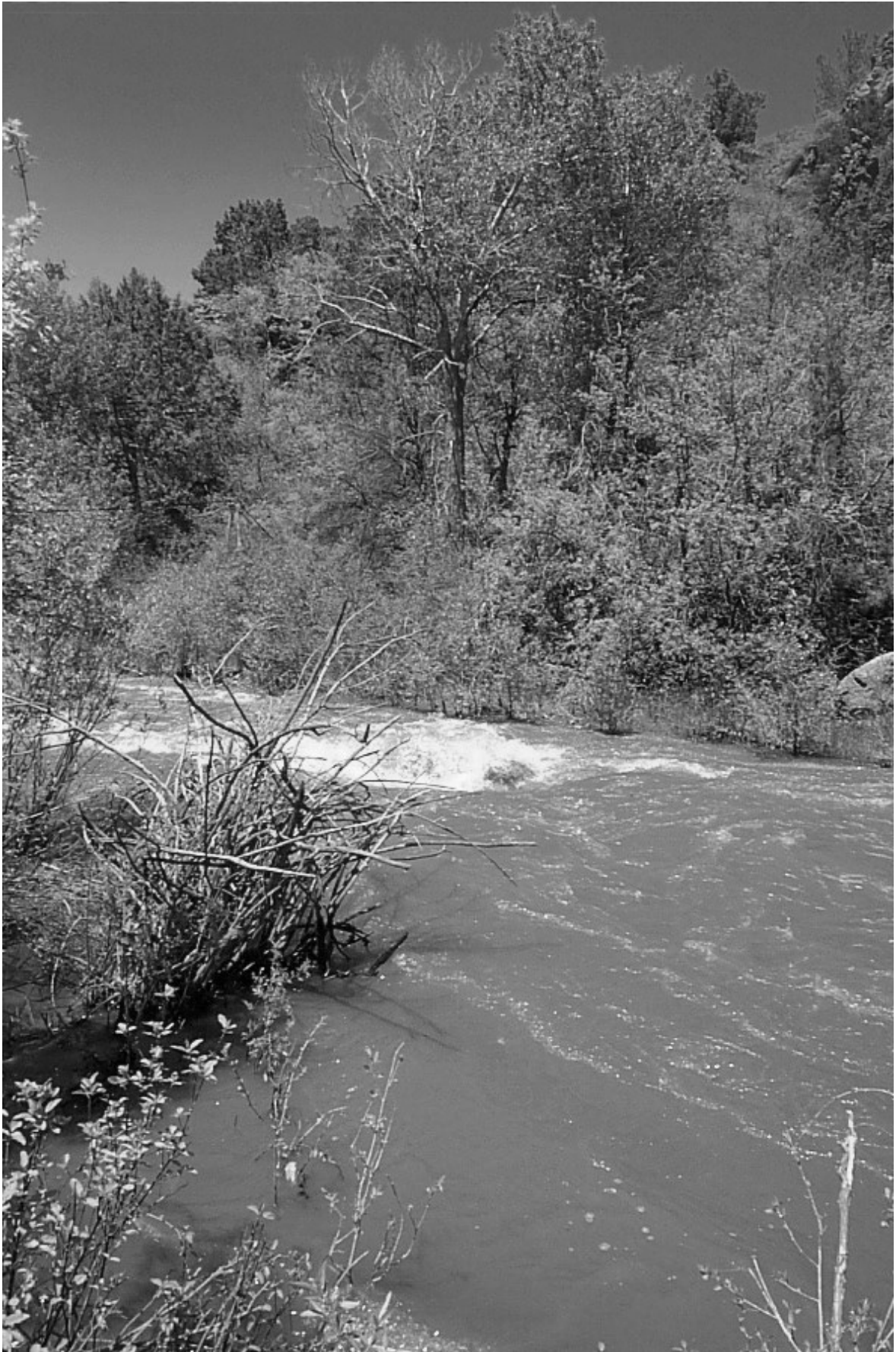
Suggest new major unofficial flood stage of 5.0 feet.

At the very top of the Beaver River watershed was a dam that could possibly become unstable. Also went to where Utah 153 was still closed 22 miles due to snow (so had to back track and take Utah 20 to US 89). When I arrived at the junction of 20 & 89 it was 1510 so decided to proceed south to Hatch.

¹ Bill Reed traveled unaccompanied in Government Van. Tuesday night was spent in Cedar City.



BEVU1 Gage House, stream within bank. wbr 5/24/2005@1300



BEVU1 Flow 569 cfs. wbr 5/24/2005@1300



Utah 153 closed about 22 miles beyond BEVU1. wbr 5/24/2005

2) Control Structure north of Hatch

This site typified what may be referred to as “scenic flooding” and was being photographed by several tourists. See Hatch for estimate of flow.



Sevier River downstream of Hatch – flow 1600 cfs. wbr 5/24/2005



Sevier River downstream of Hatch – flow 1600 cfs. wbr 5/24/2005





Sevier River downstream of Hatch – flow 1600 cfs. wbr 5/24/2005

3) Sevier River At Hatch (HATU1)

At the time of visit (1555) the gage was completely surrounded by water and flow was approximately 1.5 feet below recently graded road. Gap under bridge was 2 feet to 1.5 feet.

USGS Webpage reports 4.43 feet at 1620 cfs for 1545.

Current rating has 0 flow at 0 feet.

Official bank full stage is 3.5 feet.

Official flood stage is 3.9 feet.

Official moderate flood stage is 4.3 feet.

Official major flood stage is 4.7 feet.



HATU1 – 1620 cfs. wbr 5/24/2005@1555



HATU1 – 1620 cfs. wbr 5/24/2005@1555



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HATU1 – 1620 cfs. wbr 5/24/2005@1555



HATU1 – 1620 cfs. wbr 5/24/2005@1555

4) East Fork Virgin River nr Glendale (EFFU1)

Long Valley was free of snow. At time of visit the flow was approximately 2 feet below bank full.

Gage and staff reading 1.69 feet at 1705.

USGS Webpage reports 1.69 feet at 66 cfs for 1715.

Current rating has 0 flow at 0.8 feet.

Current bank full stage is 4.0 feet.

Current unofficial flood stage is 4.3 feet.

Suggest new bank full of 3.5 feet

Suggest new minor unofficial flood stage of 4.0 feet

Suggest new moderate unofficial flood stage of 4.5 feet.

Suggest new major unofficial flood stage of 5.0 feet.



EFFU1 – gage house. wbr 5/24/2005

5) Observations along Utah 14 including Coal Creek Control Structure 10 miles upstream of gage

At the higher elevations, snow several feet deep was observed (this snow was in the Virgin River, Sevier River, and Coal Creek drainages). The Control Structure was observed from the Utah 14. Here Coal Creek could not only be seen but also heard roaring in the canyon below.



Coal Creek – flow thru control structure 10 miles upstream of COAU1. wbr 5/24/2005@1815

6) Coal Creek nr Cedar City (COAU1)

At time of visit, flow had already begun to drop off for the day.

Gage was reading 7.4 feet at 1100 cfs on 5/24/2005 at 1840.

Gage was reading 7.02 feet at 913 cfs on 5/25 at 0805.

USGS Webpage reports 7.66 feet at 1220 cfs on 5/24 at 1845.

USGS Webpage reports 7.20 feet at 999 cfs on 5/25 at 0815.

Current rating has flow of 1 cfs at 4.13 feet.

Official bank full stage is 8.3 feet.

Official flood stage is 8.5 feet.

Current moderate flood stage is 8.8 feet.

Current major flood stage is 10.0 feet.

Suggest new bank full and flood stage of 9.5 feet

Suggest new moderate flood stage of 10.5 feet

Suggest new major flood stage of 11.5 feet

It should be noted that the City has placed temporary berms along both sides of the river thru town.



COAU1 – flow 1100 cfs. wbr 5/24/2005



COAU1 – flow 1100 cfs. wbr 5/24/2005



Coal Creek at diversion below gage (COAU1) – flow 913 cfs. wbr 5/25/2005@0805

WEDNESDAY MAY 25TH --- FIELD OBSERVATIONS AND DISCUSSIONS

7) Coal Creek nr Cedar City (COAU1)

Revisited this site in the morning -- see above photo and description.

8) Highway 89 @ Milepost 146

At this location the Sevier River was only 1.5 feet below the top of the highway and local access road was closed presumably because local bridge across river had become unsafe.

9) Sevier nr Kingston (SEKU1)

At this location the water was flowing across the field between the Utah 62 and the gage (Sevier River was over bank full stage). Therefore approximately 5 % to 15% of the flow was not being measured. Did not drive down access road to gage because conditions were such road would be damaged. Tried to walk to gage but sank to my ankles in mud.

USGS Webpage reports 4.97 feet at 1310 cfs for 5/25@1000.

Current rating has 0 flow at 0 feet.

Current bank full stage is 5.1 feet.

Current unofficial flood stage is 7.7 feet.

Suggest new bank full stage of 4.5 feet.

Suggest new minor unofficial flood stage of 6.0 feet

Suggest new moderate unofficial flood stage of 7.0 feet.

Suggest new major unofficial flood stage of 8.0 feet.



SEKU1(gage near center of picture) – flow > 1310 cfs. wbr 5/25@1000

10) Utah 62 between Kingston and Otter Creek Reservoir

At several locations the East Fork was out of banks along Utah 62 between Kingston and Otter Creek reservoir.



East Fork of Sevier River out of its banks. wbr 5/25

11) EF Sevier nr Kingston (SRKU1) and Otter Creek Reservoir

At this location I did not get to gage because it is located at base of dam between the uncontrolled spillway flow and the controlled outlet flow. River appeared about 1.5 feet below bank full stage.

Lake level was full with water up to picnic area and trailer parking sites.

USGS Webpage reports 8.40 feet at 1080 cfs for 5/25@1045.

Current rating has 6 cfs flow at 3.2 feet.

Current bank full stage is 9.5 feet.

Current unofficial flood stage is 10.9 feet.

Suggest new bank full stage of 8.0 feet.

Suggest new minor unofficial flood stage of 9.0 feet

Suggest new moderate unofficial flood stage of 10.0 feet.

Suggest new major unofficial flood stage of 11.0 feet.



Not SRKU1 but likely dam operators measuring site for East Fork. wbr 5/25



Utah 22 bridge near Utah 62 (EF Sevier).wbr 5/22



Uncontrolled spill from Otter Creek Reservoir Spillway (EF Sevier). wbr 5/25

12) Big Rock Candy Mountain

At this location downstream of Piute Reservoir, the Sevier River was threatening a few sites in a private campground.

13) Rocky Ford Dam

At Sigurd, water was backing up behind this dam that appeared near full.

14) Sevier nr Sigurd (SGDU1)

River was near bank full at time of visit 1250.

Data for this site not available from USGS Webpage at this time.

CBRFC shows observed stage and flow of 7.373 feet and 779 cfs on 5/25@1300

Current rating has 0 flow at 3.0 feet.

Current bank full stage is 10.0 feet.

Current unofficial flood stage is 11.0 feet.

Suggest new bank full of 7.5 feet

Suggest new minor unofficial flood stage of 9.0 feet

Suggest new moderate unofficial flood stage of 10.0 feet.

Suggest new major unofficial flood stage of 11.0 feet.



SGDU1 – gage house. wbr 5/25



SGDU1 – looking upstream. wbr 5/25



SGDU1 – looking downstream from bridge in previous picture. wbr 5/25

15) 100000 South (Farmer's Freeway) Gunnison, upstream of SRYU1

At this location the bridge and adjacent area was already signed as Flood Area. This location is above San Pitch River. SRYU1 is below San Pitch River.



Farmer's Freeway, Gunnison. wbr 5/25



Farmer's Freeway, Gunnison. wbr 5/25

16) Yuba Lake Dam, upstream of SRJU1

At this location it appeared that Yuba Lake had plenty of room left to hold floodwaters.



Controlled release from Yuba Lake. wbr 5/25