

Task Order 2:

- a) Obtain the rating curve for the Missouri River at Leavenworth Kansas (USGS Gaging Station 06820475). Plot the rating curve on log-log plot where the vertical axis is the stage in the river. Obtain (or approximate) a cross-section of the river at or near the gage. Plot the cross section.
- b) Obtain the rating curve for the Colorado River at Grand Junction CO, near or downstream of the Gunnison River. Plot the rating curve on log-log plot where the vertical axis is the stage in the river. Obtain (or approximate) a cross-section of the river at or near the gage. Plot the cross section.
- c) Obtain the flow data for the Missouri River at Leavenworth Kansas (USGS Gaging Station 06820475). Use the data to construct a flow-duration curve for the river.
- d) Obtain the flow data for the Colorado River at Grand Junction CO, near or downstream of the Gunnison River. Use the data to construct a flow-duration curve for the river.
- e) Determine the median discharge in the Missouri river based on the flow duration curve, and the median discharge in the Colorado river based on its flow duration curve.
- f) Estimate the reduction in stage at the median discharge that the diversion will cause in the Missouri river.
- g) Estimate the increase in stage at the median discharge that the diversion will cause in the Colorado River.
- h) Plot on the two cross sections the median stage and the added/reduced stage caused by the diversion for the contributing and receiving streams.

Technical Memorandum Due: 13 FEB 2013