

## Floodway-Floodplain Summary

HDR obtained hard copy input/output file printouts for the currently effective hydraulic model (1974 HEC2). The data was used to recreate the Effective Model using the HEC-RAS hydraulic model software. Cross section elevations were updated using topographic data generated for this project to create a Corrected Effective Model. Model results were compared to the effective Base Flood Elevations (BFEs) and found to be relatively close for the floodplain and floodway runs within the project area.

An Existing Conditions hydraulic model was then created by adding cross sections throughout the analyzed reach and adjacent to the proposed bridge location to add detail within the project area. When this model was run it was discovered that the effective floodway boundary would result in a rise greater than 0.5' over the BFE, which is contrary to County, State and Federal regulations. These results are under existing conditions, without any of the proposed South Avenue bridge work included.

A conference call between HDR, Missoula County, Montana DNRC, and FEMA representatives was conducted to discuss how best to proceed. HDR and Missoula County proposed that the effective map be revised to remap the floodway boundaries within the project area. This revised map will be used for the baseline to evaluate impacts of the South Avenue Bridge Alternatives. This revised map will not go through the formal adoption process since it will not include South Avenue Bridge. After construction is complete, it is planned that a Letter of Map Revision (LOMR) will be submitted that will correct the floodway boundary and will include South Avenue Bridge.