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**Analysis of Bankline Abutment Scour**

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A large number of bridge failures due to abutment scour during flood events have been recorded and this is of great concern to engineers and scientists. However, current scour prediction techniques are still not applicable to a wide range of field conditions. When the abutment is sited on the floodplain, the abutment blocks the flow on the floodplain and contracts the flow through a narrower cross section, where an increase in the local velocity can produce scour. The lateral flow velocity and bed shear stress distribution are redistributed due to the large-scale secondary flow cells caused by the floodplain and the main channel. The redistribution of the flow and bed shear stress between the floodplain and main channel increases as the abutment length increases. When the abutment spans the entire floodplain width and terminates at the edge of the main channel, it is called the bankline abutment. There are some recent studies in this area and these data will be reviewed and subsequently used to develop a method to predict the maximum scour depth at the abutment.