

## **WASH LOAD/BED MATERIAL LOAD CONCEPT IN REGIONAL SEDIMENT MANAGEMENT**

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**Abstract:** As water resource projects become more and more complex, there is a growing emphasis on the ability to implement effective regional sediment management. A common goal of many regional sediment management projects is the reduction of sediment loading from the watershed. This is usually accomplished by rehabilitation features such as grade control, bank stabilization, drop pipes, and land treatments. While these features are often implemented with the stated purpose of reducing sediment yields to downstream reservoirs, flood control channels, or wetlands, the spatial and temporal impacts of these features with respect to downstream sediment loads are far from straightforward, and often result in unanticipated morphologic adjustments and degradation of riverine habitats and ecosystems. Effective regional sediment management lies in identifying the sediment sources and sediment sinks in the watershed and understanding the processes responsible for transferring sediment along the pathways that link sediment sources and sinks at the reach and watershed scales. This paper describes how the concepts of wash load and bed-material load can be used to document how sediments are transported through channels systems, thereby, serving as the foundation for effective regional sediment management.