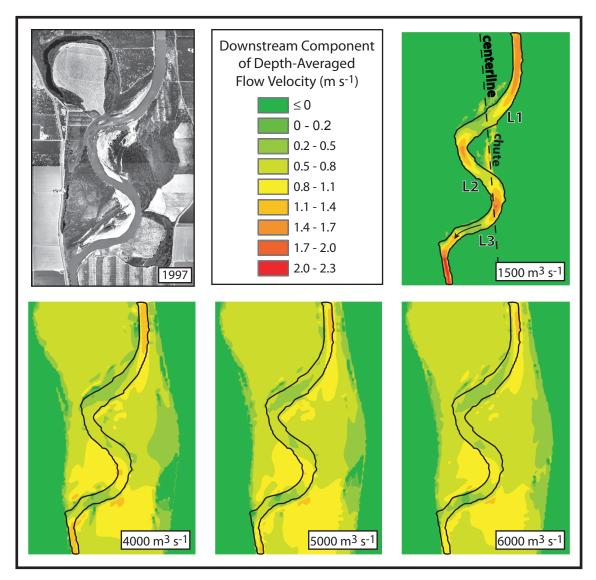
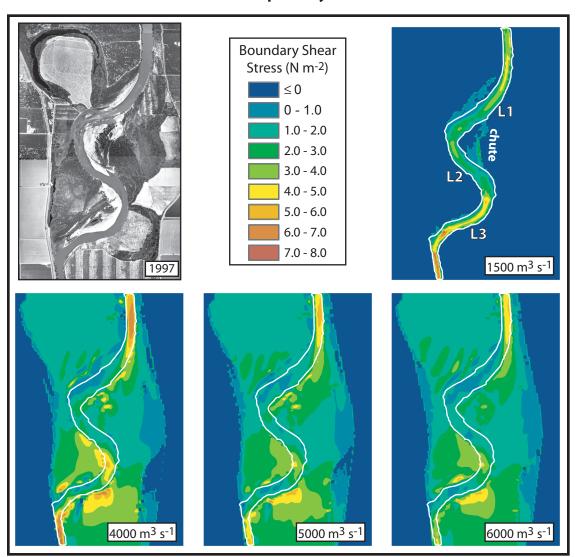
## **Data Repository Item**



**Figure DR1.** Results from MD-SWMS simulations showing magnitudes of the downstream component of the depth-averaged flow velocity for four different, steady discharges. The downstream component is parallel to the dashed centerline (shown in the upper right map) from which the grid mesh was constructed. All discharges, except for 1500 m<sup>3</sup> s<sup>-1</sup>, represent overbank flows. An aerial photo is provided of the simulated segment of the study reach, located upstream of river kilometer 264. A black outline of the 1500 m<sup>3</sup> s<sup>-1</sup> channel has been drawn into each map. Flow velocities are generally highest on the floodplain at locations L1, L2, and L3 shown in the upper left map.

## **Data Repository Item**



**Figure DR2.** Results from MD-SWMS simulations showing magnitudes of boundary shear stress for four different, steady discharges. All discharges, except for 1500 m<sup>3</sup> s<sup>-1</sup>, represent overbank flows. An aerial photo is provided of the simulated segment of the study reach, located upstream of river kilometer 264. A white outline of the 1500 m<sup>3</sup> s<sup>-1</sup> channel has been drawn into each map. Maximum zones of boundary shear stress on the floodplain generally occur where the channel curvature is greatest, or where the channel most greatly turns from the downstream flow path (labeled L1, L2, and L3 in the upper left map), and within the chute.