Shoreline woody debris in Pool 8 of the Upper Mississippi River

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Woody debris is recognized as an important habitat structure within riverine ecosystems, yet we know very little about its role in large floodplain rivers such as the Upper Mississippi River. Despite its ecological importance, wood has historically been removed from culturally significant bodies of water for navigational and recreation purposes. Defining the ecological role of wood in large floodplain rivers is an important step towards developing better conservation, restoration, and management practices. The objective of this study is to identify patterns in the distribution of shoreline large woody debris in the UMR Pool 8. I surveyed 50 shoreline sites, 25 main channel and 25 side channel, for wood larger than one meter in length. Data analyzed from these sites suggests evidence for differing sources of wood between channel types. Within the main channel it appears that translocation of wood occurs at a higher rate while side channels rely on local deposition of wood far more, making riparian habitat an important source of wood in these areas. This study provides methods and evidence that more specific or repeated monitoring of wood within the UMR would produce results with significant ecological implications.