OF MUDDY WATERS AND PRESIDENTIAL MEMORIALS:
EROSION AND SEDIMENTATION IN THE
POTOMAC RIVER WATERSHED

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ABSTRACT
This paper tells two paired stories of erosion and sedimentation in the Potomac River basin in the
nineteenth century. It describes deforestation and erosion due to iron production in the Shenandoah
Valley, the largest area of cleared land in the watershed, and it chronicles the resultant build-up of
sediment downstream in Washington, impacting navigation and commerce in the capital. George
Perkins Marsh’s Man and Nature identified these conditions as part of a long, historical pattern of
human impact on the environment, and it galvanized the public, leading to significant conservation
of forestlands. Less documented is the response to the sediment that built up in many cities and
ports downstream. Tying the two stories together illuminates a larger story about human impact and
agency in the environment, showing environmental impacts of human settlement but also showing
positive consequences of focused stewardship and design.

Keywords
Forest history, erosion, sedimentation, Potomac River, Theodore Roosevelt Memorial, George
Washington National Forest.