



# National Mall Coalition

## Washington's Two Different Flood Threats

### Washington's Two Different Flood Threats: River and Interior

This satellite view of modern Washington superimposed on Andrew Ellicott's 1793 topographic map reveals the sources for Washington's two different flooding problems: river flooding and interior (stormwater) flooding. The black lines of Ellicott's map show the original shorelines of the Potomac and Anacostia (Eastern Branch) Rivers, and of Tiber Creek as it broadens before emptying into the Potomac River.

The Washington Monument originally stood near the confluence of Tiber Creek and the Potomac River. The Lincoln Memorial, Jefferson Memorial, Hains Point, and other waterfront areas are built on landfill created in the late 19<sup>th</sup> century by the Army Corps of Engineers and so are prone to Potomac River flooding.

The old Tiber Creek, now buried under Constitution Avenue, is the lowest lying part of the city. Stormwater runoff from higher land flows down to this area during heavy storms, most recently during the deluge in June 2006 that devastated Mall museums and Federal Triangle public buildings including the National Archives.

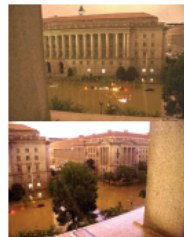
While the levee recently constructed by the Army Corps of Engineers at 17th Street and Constitution Avenue will alleviate Potomac River flooding, it will not solve the interior (stormwater) runoff flood problem. The 2011 Federal Triangle Stormwater Drainage Study, undertaken by 14 federal and District of Columbia agencies after the 2006 disastrous interior (stormwater) floods, calls for floodwater retention solutions such as a huge underground pumping station or a vast interior (stormwater) reservoir under the National Mall.



1889 The Great Flood of June 1889 inundated Pennsylvania Avenue at 6th Street NW and large portions of the National Mall (Photo: Albert H. Small Collection)



1936 During the flood of March 1936 much of the National Mall as well as East and West Potomac Parks were underwater (Photo: Library of Congress)



2006 After record-breaking rainfall flowed from higher elevations in the city to low-lying Constitution Avenue in June, one newspaper headline read "Flooding slows wheels of US Government: RE, Justice, Commerce buildings flooded as commuters see red, retail chaos" (Photo courtesy of GSA)



Visualization of 2006 flood (Courtesy Arthur Cotton-McCraw FAAR); inset shows pooling of stormwater during 2006 flood (Courtesy DC Water/WGPC)

