

Presenter	Frank R Graziano P.E. Wetland Studies and Solutions, Inc.
Type	oral presentation
Category	Innovative Watershed and Stream Restoration Approaches/Methods
Title	<i>Northern Virginia Stream Restoration Bank, Reston, Virginia. Case-Study</i>
Abstract	<p>Wetland Studies and Solutions, Inc. (WSSI), managing member of Northern Virginia Stream Restoration, L.C., has partnered with the Reston Association (RA) to restore approximately 14 miles of severely degraded streams in Phase I of the Northern Virginia Stream Restoration Bank (NVSRB). The Community of Reston was ideally suited for establishment of the NVSRB - the stream valleys within Reston are an integral part of the community, are in large part owned by RA, and are heavily utilized by residents. Also, given the geographic location of Reston, the stream network can be restored from top to bottom, greatly enhancing the likelihood of success compared to restoring only a segment of a stream reach.</p> <p>In order to gain regulatory approval of the NVSRB, WSSI worked closely with federal and state agencies to develop a “currency” (Stream Credit Units or SCUs) for assessing stream impacts and required mitigation. The resulting “Virginia Stream Impact Assessment Manual” (SIAM) developed by WSSI was approved by the U.S. Army Corps of Engineers (COE) and DEQ for use in the NVSRB and formed the basis for the “Unified Stream Methodology” (USM) developed by COE and DEQ for use throughout Virginia.</p> <p>Construction began in February, 2008. As of March, 2009, 21,440 lf had been completed, which equates to nearly all streams within the Snakeden Branch watershed (minus about 630 lf in one tributary where there has been an easement issue), plus the first reach in the neighboring Glade watershed. The Snakeden Branch watershed of 860 ac consists largely of multi-family residents and has approximately 38% impervious cover. The character of The Glade is much different than that of Snakeden Branch. The watershed (approximately 780 ac) is comprised largely of established single family homes and has an average impervious area of about 15%.</p> <p>Following construction, the MBI requires 10 years of monitoring and maintenance activities to ensure successful restorations are achieved.</p>