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Presentation Type	oral presentation
Category	1. Benefits of Stream Restoration
Title	Evaluating The Use Of Stream Restoration As An Alternative BMP For Urban Land Development In Central Virginia
Abstract	<p>Virginia is undergoing major changes in the way that stormwater runoff is addressed. In addition to the State's regulatory changes that reduce the allowable annual phosphorus loads from development to half of those previously permitted by the Chesapeake Bay Program, NPDES MS4 programs are being required to incorporate implementation of current TMDLs and plan for future TMDLs. Additionally, pressure from EPA may increase the burden to meet load reduction requirements for discharges from Municipal watersheds. Cumulatively, these changes have the potential to significantly impact the feasibility and costs associated with land development practices...particularly for the municipalities that are tasked with the management of these programs. The cost increases will necessitate an expanded suite of tools and approaches that are expected to include off-site, compensatory measures.</p> <p>Henrico County's Stream Assessment and Watershed Management Program allows the County to direct water quality efforts to address the needs of the watershed. Under certain situations, developers may pay into a fund for watershed improvements instead of using small, ineffective, on-site practices. Stream restoration plays a large part in these watershed improvement projects. Data collected on recent stream restoration projects has recently been used to develop a BMP crediting approach that uses field measurements and geomorphic assessments to determine the sediment and phosphorus load reductions associated with site-specific stream restoration projects. This approach shows promise for providing an alternative BMP to on-site practices, while meeting the requirements of Virginia's water quality regulations.</p>