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| <b>Presenter</b> | Dan I. Sweet<br>Vanasse Hangen Brustlin, Inc.   |
| <b>Type</b>      | oral presentation   |
| <b>Category</b>  | <b>Benefits of Stream Restoration</b>   |
| <b>Title</b>     | <i>Socio-Economic Benefits of Stream Restoration: Four Examples in Central and Eastern Virginia</i>   |
| <b>Abstract</b>  | <p>The majority of stream restoration projects are driven by mitigation needs and therefore the goals focus on achieving ecological lift or improvement in stream functions and values. However, a growing number of non-compensatory projects are being initiated to provide socio-economic benefits. The benefits include flood mitigation, stormwater management, infrastructure protection, pollution reduction, public safety, aesthetics, and education/recreation opportunities. This presentation details four stream restoration projects driven by social and economic goals.</p> <p>The first project describes an approach to flood risk reduction. Floodwaters from a small stream were encroaching on adjacent single family residences. The stream was relocated to an excavated floodplain and no additional flooding has occurred, despite significant rainfall events.</p> <p>The second project addresses the potential for runoff from a proposed subdivision to accelerate erosion along a steep stream valley. A channel and floodplain configuration was developed to allow for self maintaining form under the post development hydrologic regime.</p> <p>The third project focuses on pollution reduction from streambank erosion due to severe channel incision. The approach included partial channel relocation, floodplain creation, invasive plant control, wetlands protection, and an integrated trail system.</p> <p>The fourth project is a retail site, representing a significant economic development opportunity for a small town. The site footprint and proposed increases in runoff were challenging feasibility and economic constraints. The approach included relocation of a stream within a new floodplain and reconfiguration of another stream to accommodate the post development hydrologic regime.</p> |