

## **Representative Options for Improving the Donaldson Run Stream Restoration\***

Some design adjustments that could be considered might include using 1) new techniques or 2) techniques already included in the design but applied in different ways that preserve trees:

- Use the flood plain reconnection method on the lower portion of Tributary B from the foot bridge to the confluence with Tributary A to stabilize the walking trail, slow erosion in the tight curves, and take advantage of the wider valley available there for spreading out flood waters.
  - Use access to Tributary A for the heavy equipment needed to conduct the work to minimize tree loss
- Use smaller construction equipment throughout the project area.
- Chesapeake Bay Program newly approved Best Management Practices (BMP's) to credit urban tree canopy for nutrient and sediment reduction.
- Other stream restoration practices endorsed by the Water Environment and Reuse Foundation for storm water control credits
  - Bed and stream bank stabilization – Bioengineering, vanes (partial or full), drop structures and weirs (bendway or channel spanning), spur dikes, toe wood, rock walls, riprap, constructed riffle, guidebanks.
  - Riparian buffers – active planting, active management to protect vegetation
  - In-stream enhancements – log jams
- Employ more out-of-stream control measures in the project area in the stream valley
  - Swales
  - Small runoff catchment areas
  - Runoff measures for steep slopes on private land – provide education, incentives; enforce regulations
- Employ more runoff prevention and control measures in the residential, institutional, and public lands of the Donaldson Run watershed.
  - Larger catchment areas at the Salt dome and leaf mulch pile areas
  - Storm water catchments in islands in the center of many large street intersections
  - Curb cut-ins throughout the watershed where there are many steep streets and good access to grassy areas to slow and absorb water

**\* These are only examples, not an exhaustive list. Many more can be provided.**