

Diamond Hills Park Stream Restoration Project Fact Sheet

Wednesday June 29, 2011

In December 2009, the Town of Christiansburg initiated the Town's Stream Preservation and Restoration Program. The focus of the Program was the evaluation of the Town's urban watersheds and the application of stream restoration techniques to improve the function and water quality of degraded streams throughout the Town. The Program supports the Town Council's 2020 Vision of a "Green Community." The Diamond Hills Park Creek site was chosen by Town staff to be the Town's pilot project under the Stream Restoration Program. The Vision 2020 plan integrates recreational planning with the preservation and protection of natural resources. Accordingly, a recreational component was proposed for the Diamond Hills Project. The Diamond Hills Stream Restoration project was anticipated to move to construction in mid 2011.

Another obligation of the Town is compliance with the Town of Christiansburg's Municipal Separate Storm Sewer Systems (MS4) permit. This permit, which is regulated by the US EPA, requires the Town to take responsibility for water quality of the stormwater runoff that enters the Town's storm sewer system. As storm sewer systems ultimately discharge into receiving streams, a program to protect the water quality of the streams has been developed by the EPA that requires a study of degraded streams called Total Maximum Daily Load (TMDL) Study. Crab Creek currently has an approved TMDL identifying benthic impacts (sediment) and fecal coliform as pollutants. Once a TMDL Implementation Plan is developed, the Town will be required to comply with a waste load allocation (WLA) of identified pollutants. The Town's compliance with the TMDL will be enforceable through the MS4 permit. In addition to the greenspace development and recreational amenities offered by the proposed project, the restoration of the Diamond Hills Park Creek will offer several best management practices to reduce sediment loading to Crab Creek, thereby allowing the Town to demonstrate that they are meeting the WLA requirements.



A considerable hurdle for the pilot project was to find potential funding sources other than Town revenues to design and construct the pilot project. The Town of Christiansburg received an unsolicited Public-Private Educational Facilities (PPEA) proposal from Branch Highways, Inc on October 13, 2010 for the design/build of the project. Under the PPEA proposal, the site would be restored to develop off-site stream compensation credits to mitigate for unavoidable impacts associated with an industrial pad development at Progress Park in Wythe County, Virginia. Under the proposal, Branch Highways would restore the Diamond Hills Park Creek at minimal costs to the Town, as the site will serve as compensation for stream impacts at Progress Park. After a review of the proposal, it was determined that the potential project would potentially integrate some recreational amenities and infrastructure improvements planned by the Town.

The Town initiated discussions with Branch Highways on December 20, 2010 to consider the feasibility of the project. After several meetings and negotiations, the Town is proposing to move forward with the PPEA proposal. The Diamond Hills Park Stream Restoration Project will restore approximately 2,233 linear feet of impaired stream channel below Independence Boulevard that drains to Crab Creek. The stream is being designed and constructed in an alignment on the property using "natural stream channel design" technique to create a channel with a natural appearance. The project involves extensive plantings and planning for a trail network that will have both recreational and educational benefits.

When completed, the Diamond Hills Park will include a restored stream and wooded riparian area which will be protected in perpetuity as a "green space." Future plans include a trail network that may form a connection with additional recreational trail systems as well as possible recreational amenities that may be determined at a future date.