



## MEMORANDUM

**TO:** Mike Rolband

**FROM:** Alison St. Onge (ASO)

**CC:** Ben Rosner, Sean Sipple, Mark Headly

**RE:** Northern Virginia Stream Restoration Bank  
Snakeden Branch Watershed Biological Monitoring 2010  
WSSI #20003, Task I3

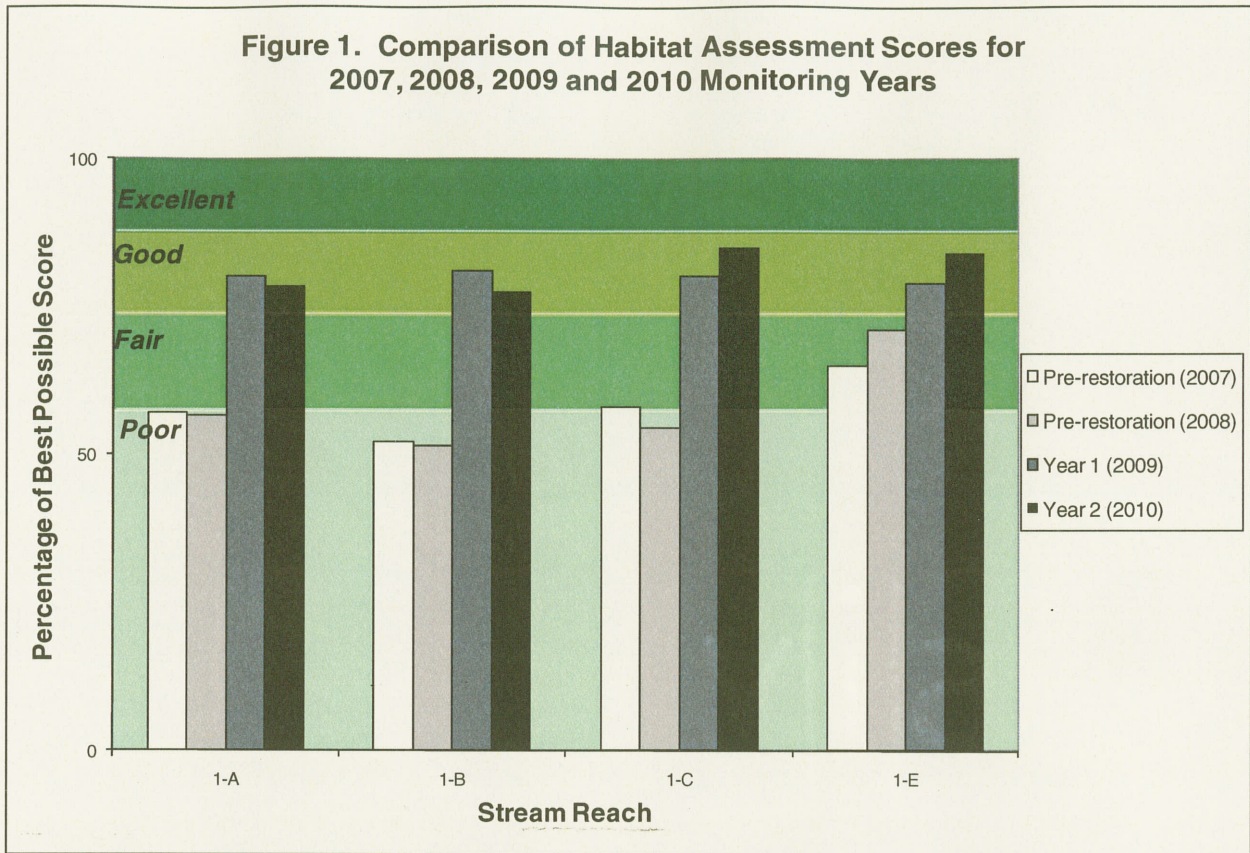
**DATE:** June 9, 2010

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Per maintenance and monitoring requirements defined in the "Northern Virginia Stream Restoration Bank Banking Instrument", Section VI.B.2.(i), biological stream assessments are to be monitored prior to stream restoration, then in years 1, 5, and 10. However, monitoring was conducted in Year 2 (2010) at biomonitoring Reaches 1-A and 1-B to collect data for a comprehensive study with South Lakes High School and the U.S. Geological Survey. Monitoring was also conducted in biomonitoring Reaches 1-C and 1-E to determine the effects of a documented continuous diesel fuel leak, just above biomonitoring Reach 1-E, on the benthic community within Snakeden Branch. Field work was conducted by WSSI environmental scientists Sean D. Sipple, Jennifer D. Feese, Jennifer Van Houten, Benjamin N. Rosner, and Caitlin E. Kelliher on May 6, 2010.

Our results indicate that the habitat assessment scores for Year 2 (2010) remained similar to the Year 1 (2009) results, falling slightly in Reaches 1-A and 1-B and rising slightly in Reaches 1-C and 1-E (see Figure 1). This is likely due to the subjectivity of the assessment methodologies. Although there was a slight decrease in the VA-SCI score in Reaches 1-E and 1-C (closer to the oil spill) Reaches 1-A and 1-B (further downstream from the spill) showed improved scores (see Figure 2). In conclusion, there have been minimal changes in stream habitat and the benthic community composition in the sampled reaches in 2010 as compared to 2009.

**Figure 1. Comparison of Habitat Assessment Scores for 2007, 2008, 2009 and 2010 Monitoring Years**



**Figure 2. Comparison of VA-SCI Scores for the 2007, 2008, 2009 and 2010 Monitoring Years**

