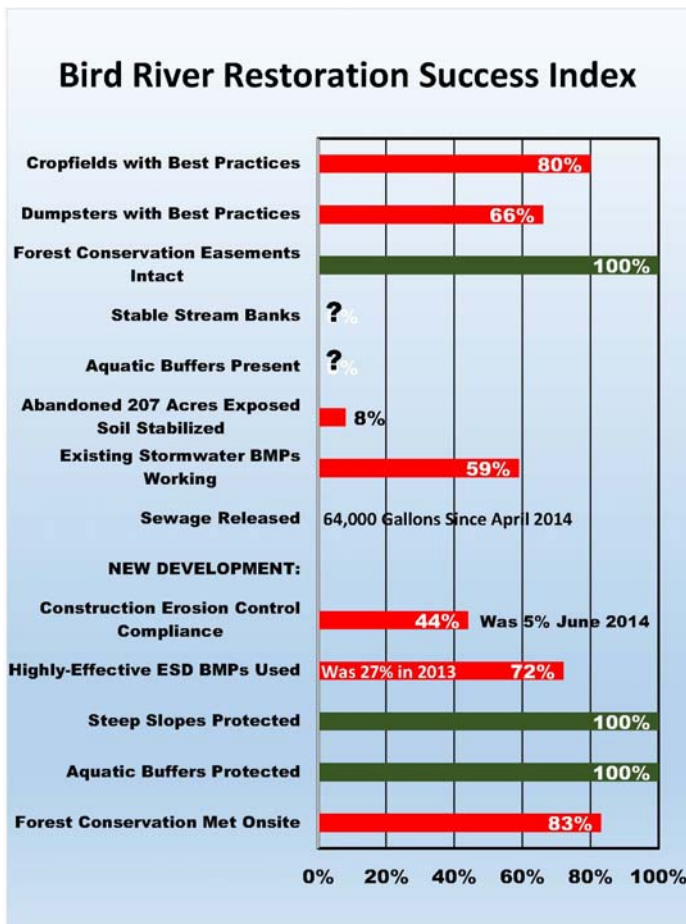


BIRD RIVER RESTORATION SUCCESS INDEX



INTRODUCTION

The Bird River Restoration Campaign is committed to making the tidal river and her 90 miles of tributary streams *Child Safe & Friendly*: free of health and safety threats, teeming with fish and wildlife, and accessible to the public via foot and boat. To achieve this goal the Bird River Volunteers have been learning about the many potential sources which can impact these waters. The Volunteers have used this knowledge to assess how well sources throughout the 26-square mile watershed comply with Best Practices for minimizing negative effects. The chart above summarizes compliance.

Cropfield with Best Practices: Last November the Volunteers found that 80% of the cropfields in the watershed benefitted from the following practices that greatly reduce erosion and sediment pollution: cover crops, conservation tillage or grassed waterways. Unfortunately the worst cropfields are located along the

south side of the River off roads like Stumpfs, Earls Beach and Bird River Grove. However, some of those farming these fields would like to make improvements if some obstacles can be resolved.

Dumpsters with Best Practices: If lids are left open on the hundreds of dumpsters throughout the watershed then large quantities of trash could be carried by the wind to litter stream and river sides. Open dumpsters can also accumulate rain which when mixed with trash can form a polluting brew which escapes through holes or when the dumpster is tipped into the collection truck. The Volunteers have found that only 66% of dumpsters have closed lids and complied with other best practices. We're seeking Volunteers to help educate dumpster owners-renters about Best Practices.

Forest Conservation Easements Intact: Since the early 1990s developers have been required to set aside 15% to 20% of each site as Forest Conservation Easements (FCE). A comparison of eleven easements in the Bird River watershed with recent aerial photos shows a near 100% compliance rate.

Stable Stream Banks: The Bird River Small Watershed Action Plan (SWAP) cited stream bank erosion as the leading source of sediment pollution. Since the early 1990s the County and State have spent upwards of \$30 million on stream bank stabilization projects in our watershed. These projects may have eliminated much of the sediment derived from channel erosion. But we don't know what percentage of all eroding banks have been stabilized. The Volunteers may seek to gather this data.

Aquatic Buffers Present: Based on a partial survey of the watershed, the SWAP identified 5.3 miles of Bird River tributaries lacking a 100-foot wooded buffer extending from both banks. The County-State restoration projects certainly have helped with this issue, but we cannot say how many miles of poorly buffered channel remain. The Volunteers may also seek to gather this data.

Sewage Released: According to the Maryland Reported Sewer Overflow Database there have been at least 46 releases of nearly 400,000 gallons of sewage into the Bird River system since 2005. Three of the

releases totaling 64,000 gallons occurred during the past year (April 2014 - April 2015). Our goal is zero sewage release.

Construction Erosion Control Compliance: With the possibility that stream bank stabilization is pretty much complete, construction sites have become the largest source of sediment. State law requires that once grading is completed all exposed soils must be covered with a thick layer of straw and seeded with grass. These *erosion control* measures reduce sediment pollution by 90% to 99%. In June 2014 the Greater Baltimore Survey documented a 5% compliance rate in our watershed. This finding led to an increase in support for the County to improve enforcement. In November 2014, 58 Bird River Volunteers surveyed 26 construction sites and found a nine-fold increase in compliance!

Other Exposed Soil Stabilized: The Volunteers found 207 acres of exposed soil polluting the river system with large amounts of eroded soil. These exposed soils are located on inactive construction sites, former mines, landfills and unpaved parking lots. Last January we asked County and State officials to work with the property owners to stabilize these pollution sources. We believe that thus far only 8% have been stabilized.

Stormwater BMPs Working: Since the 1980s more than 300 ponds and other stormwater Best Management Practices (BMPs) have been built throughout the Bird River watershed. They were designed to trap pollutants, maintain groundwater recharge, reduce channel erosion and flooding. The Volunteers have been visiting these BMPs and have found that 41% are no longer providing these benefits due to a variety of maintenance issues. We will be working with the County and BMP owners to win the necessary repairs.

Use of Highly-Effective ESD BMPs: Since 2009 most new development has been required to use Environmental Site Design (ESD). With ESD we can gain the benefits of *well-managed growth* with essentially no aquatic resource impacts. ESD consists of the use of highly-effective BMPs to control runoff along with aquatic buffers, preventing disturbance of steep slopes, maximizing forest retention, etc. Unfortunately, of the 492 ESD waivers granted statewide, 307 were issued by Baltimore County. So many development projects, like Nottingham Ridge, were exempted from ESD compliance. However, a limited review of recent development plans shows an

72% ESD compliance rate. So things may be improving.

Steep Slopes Protected: The limited review of development plans showed that 100% of steep slopes were protected from impacts due to new houses, roads or other disturbances. A steep slopes rises or falls more than 25 feet vertically for every hundred feet of horizontal distance.

Aquatic Buffers Protected: The limited review of development plans showed that 100% of buffers to protect wetlands, streams and other aquatic resources were protected from impacts due to house, road or other forms of construction.

Forest Conservation Met Onsite: Forest covers 29% of the Bird River watershed. To meet our Child Safe & Friendly criteria the forest cover must increase to a minimum of 45%. New development is the leading cause of tree loss. Developers are required to set aside a minimum of 15% to 20% of each site as Forest Conservation Easements (FCE). The limited review of development plans showed that 75% of forest conservation requirements were met onsite, which is best. Developers paid a fee to meet the other 25% of their conservation requirements offsite. Which means forest was planted somewhere else; not necessarily in the Bird River watershed. If we are to achieve the 45% goal then the County must ensure fee-in-lieu funds are spent to plant trees in our watershed or deny this option.

Would You Like To Make A Difference?

Please consider becoming a Bird River Volunteer. We'll only ask two hours of your time per month for no more than three months. The first hour will be spent showing you how to make a difference with whatever issue is of greatest concern to you. The rest of your time will be spent working with other Volunteers to inventory potential problem sources or to carry out activities to resolve a problem. All of our problem-solving actions are based on cooperation, not confrontation. So to become one of the few, the proud Bird River Volunteers contact Campaign president Janet Terry at 410-335-8915 or Janet@restorebirdriver.org. Also, please consider making a donation of dollars to the Campaign by clicking the Donate Now button on the right side of the restorebirdriver.org website. ***Though we are all volunteers - no one is getting paid - we still have considerable expenses.***