

HAYMAKER RUN STREAM RESTORATION PROJECT MUNICIPALITY OF MURRYSVILLE, WESTMORELAND COUNTY, PENNSYLVANIA

WHM Consulting, Inc. (WHM) was retained by Blazosky Associates, Inc. (BAI) to complete a natural channel design and construct a section of West Fork of Haymaker Run that flows through a residential development in the Municipality of Murrysville, Westmoreland County, Pennsylvania.

The Turtle Creek Watershed Association (TCWA) received a Growing Greener Grant and funding from private landowners for the design of a natural stream channel restoration project on a section of the West Fork of Haymaker Run. Despite zoning changes to minimize runoff from new development in the municipality, the West Fork of Haymaker Run as been severely degraded by excessive stormwater runoff. These high stormwater flows have eroded the channel as it flows through a municipal park, Bear Hollow, and a suburban neighborhood, Heather Highlands. Heavy deposits within the neighborhood have shifted the base flow of the stream, causing concern for landowners and the TCWA.

The goal of the project was to stabilize the degraded 2200' stream segment of the West Fork of Haymaker Run and improve aquatic habitat within the stream reach and further downstream. This design approach was based on using natural stream channel design techniques and methodologies. This approach uses natural channel formation principals to provide a stable stream channel and adequate stormwater and bedload transportation routing. A summary of the work included: channel reconstruction, cross rock vanes, J-hook vanes, riparian zone plantings, and channel realignment.

The final project consisted of constructing and maintaining approximately 1880 LF of stream channel improvements consisting of approximately 600LF of channel relocation, 9 rock and log cross veins, 9 log J-hook veins, 3 log grade control structures, riparian zone plantings and channel re-alignnment, all on an un-named tributary to Haymaker Run (HQ-CWF).



BEFORE



DURING



AFTER