



S T R A U G H A N
E N V I R O N M E N T A L
S E R V I C E S , I N C .

Wetland Delineation, Forest Conservation, and Stream Restoration Science Park Access Road

Location: Annapolis, Maryland

Client: Anne Arundel County, Maryland

Description: Anne Arundel County designed a new connector roadway to improve local traffic circulation and relieve congestion in the Annapolis area. Straughan Environmental Services, Inc. (SES) performed initial wetland and forest stand delineations to identify natural resources in the area, and then worked closely with project engineers to develop an alignment that would avoid or minimize impacts. After design concepts were finalized, SES prepared the permit application, and supported the County at public meetings on this project, which was scrutinized by environmental groups and neighboring communities.

Once the final alignment of the roadway and associated mitigation requirements were determined, SES worked with Anne Arundel County to select a portion of a tributary of Church Creek that would satisfy mitigation requirements. SES designed the 700-foot long stream restoration project using natural channel design principles. This approach will help establish a more natural riffle-pool sequence and meander pattern, thus improving in-stream habitat conditions and sediment transport.

Once the final design was approved by the Maryland Department of the Environment and the U.S. Army Corps of Engineers, SES helped Anne Arundel County to prepare bid documents and to review contractor bids to identify the most responsible bidder.

SES monitored construction of the restoration site to ensure that structures such as log vanes and step pools were installed properly and that erosion/sediment control measures followed county guidelines.

SES conducted the first year of mitigation monitoring (required for five years) to assess the stability of the stream channel. Monitoring results indicated that the stream channel is stable, vegetation is thriving, and instream habitat is optimal for both fish and macroinvertebrates.