

Summer Intern Stream Assessment

Program Objectives

WIP Subwatershed Project Reach Evaluations

The original field reconnaissance data utilized to identify problem areas and potential restoration projects in the subwatersheds is now fifteen years old. To document stream reach conditions and determine the continued need for restoration/stabilization along the subwatershed reaches, QWA began conducting pre-implementation geomorphic assessments in 2017. These assessments were conducted by summer college interns funded by QWA and Doc Fritchey Chapter of Trout Unlimited and trained by Clear Creeks Consulting. The focus of the 2017 assessments was the stream reaches in the Snitz Creek subwatershed. Similar assessments were conducted during summer 2018 along Beck Creek subwatershed. The assessments to be conducted during summer 2019 will focus on the Bachman Run subwatershed.

Clear Creeks Consulting developed the protocols for the assessments to provide information that can be utilized to evaluate overall channel stability, in-stream habitat and water quality. The assessments include:

- Visual Assessment of existing land use, channel and in-stream habitat conditions;
- Field measurements of representative riffle and pool baseflow and bankfull dimensions;
- Riffle pebble counts to assess riffle embeddedness;
- BANCS evaluations of eroding streambanks to estimate bank erosion rates and calculate sediment loadings;
- Photo-documentation of existing conditions along each of the evaluated stream reaches.

Field Forms

- Stream Visual Assessment Field Form
- Stream Visual Assessment Field Data Summary
- Pebble Count Data Form
- BANCS Field Form

Additional Field Materials

- Location Maps (showing location of Bachman Run and its tributaries relative to roads)
- Bachman Run Property Ownership by Stream Reach with Landowner Names and Addresses
- Aerial Photographs (showing Property ownership, property boundaries, Reach ID#, reach limits)
- Topographic Maps (showing Property ownership, Reach ID#, reach limits) to be utilized for taking field notes
- Basic Invertebrate Key for identifying stream insects and other invertebrates

Intern Responsibilities

- Maintain field equipment and field forms and additional field materials in good condition and return to Quittapahilla Watershed Association (QWA).
- Interns should complete all field forms for each stream reach evaluated.
- Copies of the completed field forms, maps, and documentation photographs should be compiled in a notebook binder separated by stream reach.
- The notebook will be submitted to the Quittapahilla Watershed Association and Clear Creeks Consulting for review and analysis.