



Title: Assessing Watershed Health Using the USDA Visual Stream Assessment Protocol

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Organization: Rutgers Cooperative Extension

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Year of Funding:

Theme: Watershed Management

Situation: Although there are numerous models and protocols for assessing the health of a waterway, many of these systems require extensive data that can prove costly to collect. This research project focused on using an enhanced version of the USDA Stream Visual Assessment Protocol (SVAP) as a simple method of collecting stream data that could be incorporated into a Geographic Information System (GIS). The linking of SVAP with GIS has allowed for the creation of an enhanced watershed assessment system.

Objectives: The main objective of the study was to link the enhanced version of the SVAP with a GIS to allow for the creation of an enhanced watershed assessment system to help identify and prioritize potential restoration and preservation sites within a watershed.

Methods: The enhanced SVAP was used to collect data for a GIS of NJ's Watershed Management Area 3. Volunteers were trained on how to use the SVAP to collect data on the local waterways. Over 400 miles of stream were examined encompassing almost all of the stream miles within the watershed. Once these data were incorporated into a GIS, creating an enhanced watershed assessment system, potential restoration and preservation sites were identified and prioritized as part of a master planning process.

Partnerships: Partnerships with Rutgers Cooperative Extension, US EPA Region 2, NJDEP, local watershed groups, and other local and state agencies have been established and enhanced.

Research: The project integrates research and outreach by researchers and extension educators transferring scientific knowledge of an enhanced watershed assessment system to volunteers, local watershed groups, farmers, and key stakeholders in WMA3.

Resources: The New Jersey Agricultural Experiment Station funded this project through faculty and support staff time contributed to the project.

Results: There is a need in EPA Region 2 for a cost effective means of assessing the health of waterways and identifying problem areas. These tools need to be based on good science, and they also need to be accessible to stakeholders so they can use them to focus their restoration and preservation efforts. One major advantage of the SVAP is that volunteers can be trained to effectively use the protocol. This use of volunteer monitors will become crucial as state and federal budgets continue to be cut.



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