Watershed Assessment Phase

The assessment phase is the first step used by soil conservation districts (SCDs) to evaluate water quality conditions in a watershed. The purposes of an assessment phase project are to determine water quality conditions, as well as identify the causes and sources of the documented water quality problems. Basic components of a typical assessment project are as follows:

- Current water quality conditions are measured to determine if there are any impacts or concerns.
  - Samples are collected to track concentration trends for pollutants such as nitrogen, phosphorus, total suspended solids and E. coli bacteria.
  - Macròinvertebrate data is collected.
  - Stage and stream flow are measured, and pollutant loadings are calculated.
- Sources and causes of pollutants impacting water quality are identified.
  - Riparian/streambank conditions are characterized.
  - Crop types and cropland management are determined.
  - Livestock feeding and grazing management practices are evaluated.
  - As applicable, other sources are evaluated (e.g., mining areas, urban areas, etc.).
- Input is solicited from landowners, agricultural producers and watershed residents to gauge interest and determine the most feasible management options for addressing identified water quality concerns.
- Assessment data is summarized, and a report is developed for the SCD to use when making future watershed management decisions and/or when developing plans to address identified water quality concerns.

Watershed Implementation Phase

The watershed implementation phase is the “product” of the assessment phase efforts. Based on the information collected during the assessment, the local sponsors and residents establish specific water quality improvement/restoration goals for the watershed, identify what needs to be done to meet those goals, and set a budget for implementing the project. All this information is included in a multi-year watershed project implementation plan (PIP). Basic components of a PIP are as follows:

- A clear set of goals and objectives for addressing the documented water quality problems is established, including:
  - Specific water quality improvement targets
  - Types and amount of best management practices (BMPs) to be implemented
  - Priority areas identified for directing technical and financial assistance
  - Timelines for implementing the project and tracking progress in water quality improvement and BMP application.
Benefits of a 319 Watershed Project

There are many benefits that local residents, producers and resource managers can realize through a watershed project. These benefits start with the assessment phase and continue through the implementation of a watershed project. Some of the most common benefits include:

- Questions about water quality issues in the watershed are answered.
- Direction is determined for planning and implementing conservation practices and other corrective measures.
- There is a better understanding of producer and landowner needs in the watershed.
- A track record is established of efforts applied and progress to improve water quality and land management.
- Partnerships are expanded or strengthened. These may provide more opportunities for financial and technical assistance through other federal or state programs (e.g., greater coordination with the U.S. Department of Agriculture Environmental Quality Incentives Program or access to engineering support through the NPS BMP Team).
- Access is provided to information on new equipment, different management issues and/or BMP options in the watershed.
- Section 319 funding is allocated specifically for the watershed project to cost share BMP implementation as well as support project management and staff.
- Section 319 funding is administered locally, which greatly streamlines the BMP planning and cost-share process. In addition, these funds are awarded in a “lump sum” to cover the costs for the entire project period (up to 5 years), which eliminates the uncertainties associated with an annual allocation process.
- Project staff are employed by the sponsors to provide one-on-one technical assistance to producers and landowners, coordinate educational events, manage Section 319 BMP cost-share funds, solicit additional funding options, and monitor progress.