



Key EPA Internet-Based Tools for Watershed Management

In-Depth Level Course Tutorial

Section Eight: Technical Tools for Hydrology and Sediment Assessment (WARSSS)

Full document available at

<http://www.epa.gov/owow/watershed/wacademy/epatools/>

**Assessment and Watershed Protection Division
Office of Wetlands, Oceans and Watersheds
U.S. Environmental Protection Agency**

8. Technical Tools for Hydrology and Sediment Assessment: WARSSS

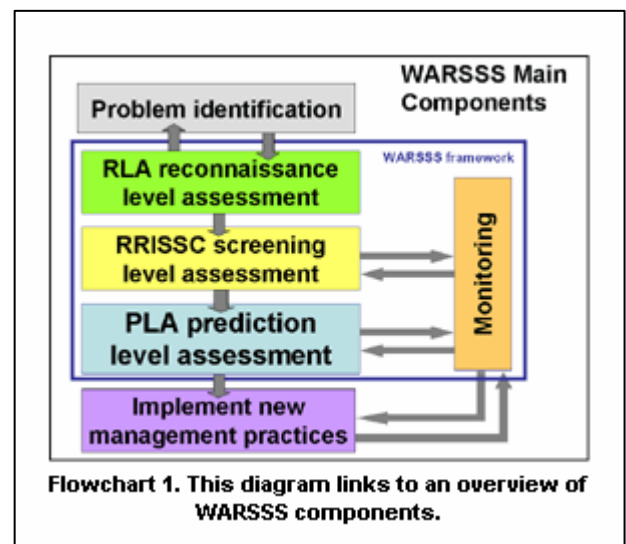
Sediment pollution can create turbid water and form silt deposits that can harm aquatic life and reduce recreational uses of our waters. Excess sediment impairments are among the most common river and stream water quality problems reported by state monitoring programs.

WARSSS stands for Watershed Assessment of River Stability & Sediment Supply and is a technical procedure developed by Dr. David L. Rosgen for water quality scientists to use in evaluating streams and rivers impaired by excess sediment. **WARSSS** has been adapted into a Web-based assessment tool.

WARSSS can be used to analyze known or suspected sediment problems, to develop sediment remediation and management components of watershed plans, and to develop sediment TMDLs.

WARSSS hinges on a three-phase technical assessment framework.

- Phase I: RLA (Reconnaissance Level Assessment)
- Phase II: RRISSC (Screening Level Assessment)
- Phase III: PLA (Prediction Level Assessment)



Each phase has a flowchart of decision-making and screening steps. Each step in the process has its own explanation, worksheets and resources.

- 8.1 Open [WARSSS](#).
- 8.2 Click [RRISSC](#) - **Rapid Resource Inventory for Sediment and Stability Consequence**.
- 8.3 Scroll down to the bottom of the page and click [Begin RRISSC](#).

This is an example of the decision and process flowchart around which the WARSSS assessment method is built for the RRISSC Screening Level Assessment.

- 8.4 Under Risk Rating System, click **flow chart box # 10**, Assess Potential Streamflow and Flow-related Sediment Changes. Notice that this step gives a good example of the detailed explanations, figures and worksheets available for doing assessments.

