

Web-Based Watershed Tools for the Classroom: A Pilot 319 Project for Grades 4-8 in Missouri Watersheds

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Biographical Sketches of Authors

Tabitha Madzura is the Director of the Missouri Watershed Information Network (MoWIN) a University of Missouri Outreach & Extension Water Quality Project. Tabitha currently locates, accesses and compiles watershed-related information into MoWIN's website, edits, writes grant proposals, plans and implements project programs, writes publications, prepares and delivers conference/workshop presentations and manages the project web site. Tabitha was awarded Association of Natural Resources Extension Professional Silver Award (2nd place) for developing a Web-based watershed management curriculum in 2003.

Vishal Rijhwani is a Graduate Student in University of Missouri Columbia, He is responsible for developing & designing interactive websites for five watersheds in Southwest & Northeast Missouri based on information provided by local watershed groups & other research projects. He updates Mowin website periodically as directed. Vishal also assist in developing the project newsletter. His interest lies around developing Interactive Web sites & web related tasks. His aim is to develop a web based learning environment using animation to enhance understanding of the student & to make learning a fun.

Abstract

Water is costly to purify and transport, impossible to substitute - and essential to food production, economic development, plant and animal life. In the United States over 250 million people depend on rivers, lakes, streams and ground water supplies for their drinking water. Approximately 179 water bodies are listed on Missouri's 1998 Final 303 (d) List for Impaired Waters and require immediate restoration to designated uses. Many streams suffer from low water volume, organic enrichment, siltation and polluted runoff. There is need to address surface runoff, groundwater, sediment, in-stream nutrients, wildlife and fish populations from the perspectives of researchers, state and federal conservationists, local citizen-based watershed groups, natural resource interest groups, landowners, farmers, young children plus local officials.

The Internet is increasingly playing a vital role by providing access to watershed information. MoWIN proposed to develop and disseminate interactive watershed information web sites for use in schools (grades 4-8) in five Missouri watersheds. Web site topics include history, agricultural activities and statistics, human impact on the environment, recreational resources, non-point source pollution and prevention, plant and animal life plus water quality information. This project is an additional tool for educators to improve science education library collections and integrate watershed education with science, social studies and other subjects and to help increase children's awareness of local community natural resources. Objectives include: providing information to encourage participation in watershed stewardship; increasing knowledge and understanding about watersheds and facilitating development of skills to identify and prevent nonpoint source pollution. For additional information please visit <http://outreach.missouri.edu/mowin>