

## **Wyoming's Credible Data Legislation: Monitoring Water Quality and Extension's Role**

**Quentin D. Skinner<sup>1</sup> and Katta Jayaram Reddy<sup>2</sup>**

<sup>1</sup>Professor Rangeland Ecology and Watershed Management, <sup>2</sup>Associate Professor Watershed and Water Quality, Renewable Resources Department, University of Wyoming, Box 3354, Laramie, WY.

### **Biographical Sketches of Authors**

Quentin is a 30 plus year employee of the University of Wyoming. His three way appointment has provided him opportunity to conducted research, teach, and promote extension programming during these years. His specialty is Wildland Watershed Management and he is focused on knowing more about water quality, riparian zone ecology, and stream function. His recent challenge is to further the understanding of how volunteer water quality monitoring data is interpreted considering function of streamflow dynamics, watershed function, user demands, and regulatory standards.

K.J. Reddy, is a teacher, research scientist, and provides extension expertise to serve natural resources and water quality issues. He teaches Wyoming's water quality courses and has established a recognized and successful water quality research program. His numerous journal publications, book chapters, and featured articles are well received by water quality audiences. He is a respected adviser of high school and college students of all levels. His relationships with diverse clientele are illustrated by his appointments to the University Graduate Faculty; Wyoming TMDL Research Committee; American Water Resources Association TMDL Research Committee; and Review Panel Water Research Journal.

### **Abstract**

In 1999, Wyoming passed legislation requiring the use of "Credible Data" in decisions concerning the attainment of beneficial uses when assessing water quality. Credible data, as defined "...includes scientifically valid chemical, physical, and biological monitoring data collected under an accepted sampling and analysis plan, including quality control and quality assurance procedures and available historical data".

To meet the intent of this legislation, the Wyoming Association of Conservation Districts (WACD) assumed responsibility for conducting water quality monitoring within local districts. WACD's objectives are: 1) Gather credible baseline data to facilitate spatial and temporal analysis of chemical, physical, and biological data. 2) Identify the geographic and temporal extent of impairments, if present. 3) Provide background information for future watershed studies, which integrate user activities of the watershed with monitoring programs so cause and source of water body impairments could be determined should they exist.

WACD, the NRCS, the University of Wyoming Cooperative Extension Service (UWCES), Wyoming Department of Environmental Quality, and the United States Geological Survey trained personnel. Currently, 22 of 24 Wyoming districts are supported by a tax base and 33 of 34 have implemented monitoring programs. The UWCES has completed a 4 year case study of implementation, evaluation, and interpretation of one district's monitoring program. A second case study is in progress. Both are designed to meet the credibility criteria established by Wyoming. This presentation addresses the collaboration needed to monitor water quality and UWCES's extension role in making it happen.