

**Speaker:** David R. Tuthill, Jr., Ph.D., P.E.

**Title:** President

**Organization:** Idaho Watershed Solutions, Inc.

**Session Title:** A Watershed Approach to Achieve Water Quality Improvement in the Boise River Basin

**Abstract:**

Phosphorous is a nutrient of concern in the Boise River Basin. NPDES permit holders are facing increasing requirements for phosphorous reduction. The potential costs to NPDES holders have been estimated to be in the hundreds of millions of dollars.

Most of the phosphorous in the Boise River is attributed to non-point sources. Might there be a way to incentivize non-point source nutrient providers to help reduce phosphorous in a manner that benefits these providers while providing cost-effective solutions for NPDES permit holders?

Idaho Watershed Solutions, Inc. is a new Idaho corporation seeking non-profit status. The vision of this corporation is to improve water quality using watershed solutions. In the Boise basin these solutions include (1) improved water management via automation, (2) riparian treatments including wetlands (3) precision agriculture, and (4) reuse of both municipal and drain water. Our approach is to update and activate the largely unused water quality credit trading system in the Boise basin, establish pilot projects, and identify and implement win-win agreements between point source and non-point source water providers. The reuse of municipal and drain water is key to the success of this process.

**Biographical Summary:**

Dave Tuthill is the President of Idaho Watershed Solutions, Inc., created this year to provide for water quality improvement of watersheds through Idaho. Dave is also the founder of Idaho Water Engineering, LLC.

Dave has worked in the field of water resources throughout his adulthood. He worked for the Idaho Department of Water Resources from 1976 through his retirement from the State of Idaho in 2009. During the period from January 1, 2007 through June 30, 2009, he had the privilege of serving as Director of the agency.

Dave earned a B.S. degree in Agricultural Engineering from Colorado State University in 1974, a M.S. degree in Civil and Environmental Engineering from the University of Colorado in 1975, and a Ph.D. in Civil Engineering from the University of Idaho in 2002. He retired from the Engineer Branch of the U.S. Army Reserve as a Colonel in 2004.