

Biedenharn Group, LLC

Areas of Expertise

*River Engineering
Stream Rehabilitation
Fluvial Processes*

Education

BS, 1967, Louisiana Polytechnic Institute
MS, 1972, Louisiana Tech University
PhD, 1982, Colorado State University

Registration

Colorado Professional Engineer

Professional Affiliations

F.ASCE

Academic Teaching and Advising

Emeritus Professor
Stream Rehabilitation Design (CIVE 613)
Field Methods (CIVE 521)

Research and Publications

Research activities have provided funding for support of numerous graduate students
Authored numerous publications, including co-author of handbooks, manuals, textbooks and chapters for other books

Lectures, Workshops, and Seminars

Presentations on *geomorphology, channel rehabilitation and stream bank stabilization* to numerous agencies including USACE, USGS, WES, USEPA, NRCS & IECA

Volunteer Service

Larimer County Floodplain Review Board,
Fort Collins, CO

CONTACT INFORMATION

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Chester C. Watson, PhD, PE

Dr. Watson is presently Principal Investigator (PI) for projects involving erosional stability of watershed and stream systems, effectiveness of stream stabilization, and river and stream restoration. Major current projects include of a stream restoration design in Illinois, the investigation of the required sediment flux for the rehabilitation of Gulf coastal marshes, advisor for Platte River habitat restoration and developing design alternatives for stability and flood control for rivers affected by the Mt. St. Helens eruption.

Technically, his emphasis has been on the analysis of watershed and channel system instability. He is involved in a major research effort for Waterways Experiment Station (ERDC), U. S. Army Corps of Engineers (USACE) to develop methods for rehabilitation of streams that have been destabilized due to land-use change and channelization. Working with ERDC personnel and other participating groups, Dr. Watson has developed design, monitoring, and evaluation tools for channel stabilization. He is also presently participating in the development and testing of procedures that will include physical habitat features as a component of the channel stabilization design.

Other projects include development of design guidelines for channel rehabilitation that will improve habitat and reduce nutrient pollution of streams. He was a member of the National Technical Review Committee for the New Orleans District, USACE for projects related to coastal marsh restoration and river sediment supply. Dr. Watson is now an Emeritus Professor and continues to advise graduate students at CSU.

EXPERIENCE

Principal Investigator, Biedenharn Group

Professor, Department of Civil Engineering, Colorado State University, Fort Collins, CO (1990-2006)

President, Water Engineering & Technology, Inc., Fort Collins, CO (1979-1990)

Vice President, Pyburn and Odom, Inc., Consulting Engineers, Baton Rouge, LA (1972-1978)

General Manager, Wicker Construction Company, Shreveport, LA (1968-1971)

Engineer, Florida Power and Light Company, Miami, FL (1967-1968)