Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Decision Support Program for Management of the Truckee Carson Watersheds and river systems

Type of Project : Research

Project Discipline : Natural

Funding Agency: Bureau of Reclamation

Other Partners/Cooperators: University of Colorado at Boulder; USGS

Effective Dates: 1/1/2009 - ?????

Funding Amount: \$80,000

Investigators and Agency Representative:

Agency Representative:

Investigators: Edith Zagona, CivilEng-CADSWES, University of Colorado at Boulder, Boulder, CO 80309, 303-492-2189; Edith.Zagona@Colorado.EDU

Project Abstract:

Since 1994, the Bureau of Reclamation (BOR) has been involved in a joint research program with the USGS entitled Watershed and River System Management Program. The program objectives are to research, develop, and implement Decision Support Systems (DSS). DSS are computer models and full integrated data management systems to help water managers and water users increase the environmental, economic, and social benefits of water systems. The major components of DDS include a Hydrologic Database (HDB); a watershed runoff modeling system, Modular Modeling System (MMS); RiverWare river and reservoir modeling system; and a set of analytical tools.

The Center for Advanced Decision Support for Water and Environmental Systems (CADSWES) is a non-profit research and development group within the Department of Civil, Environmental, and Architectural Engineering at the University of Colorado Boulder. CADSWES is the prime developer of the RiverWare modeling tool and the HDB.

The Truckee River Operating Agreement (TROA) will alter BOR project operations to affect the Truckee River for the benefit of fisf, wildlife, and urban use. Reclamation is utilizing the RiverWare modeling to predict the effects on water quality and fish habitat in response to these changes.

By updating, modifying, and maintaining the RiverWare Decision Support Program through this agreement, the DDS will have increased flexibility and functionality for managing water systems in a more effective manner. This agreement will continue the modeling research at CU-Boulder.

Outcomes with completion dates (reports, publications, workshops, videos, etc.):

Keywords: Watershed and River System Management Program; Decision Support Systems; RiverWare river and reservoir modeling system; Bureau of Reclamation; University of Colorado at Boulder; Center for Advanced Decision Support for Water and Environmental Systems