



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002CO2B

Title: Enhancements to the South Platte Mapping and Analysis Program (SPMAP)

Project Type: Research

Focus Categories: Agriculture, Groundwater, Water Use

Keywords: Agricultural consumptive use, Geographic information system, Augmentation, Conjunctive use of groundwater/surface water

Start Date: 03/01/2002

End Date: 02/28/2003

Federal Funds: \$4,832

Non-Federal Matching Funds: \$9,668

Congressional District: 4th

Principal Investigator:

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Abstract

Abstract: Local water management organizations in the Lower South Platte have sought the development of computer based tools tailored to the modeling needs of this unique area. Specifically, there is a need to upgrade current technology used to manage the conjunctive use of ground and water resources in the South Platte Basin and to determine augmentation requirements. These systems are complex and require data and models that can work with both large and small areas and time periods. Computer tools can be used to manage this data and run models specifically designed for this problem. Current SPMAP tools are proving themselves to be very valuable, but there is a need to maintain the spatial database to run these tools as well as develop additional enhancements to better address the needs of local water providers. This project will continue the close cooperation with water managers that has been established over the last five years and allow the SPMAP tools to be improved and maintained. Water user groups consider the SPMAP effort as the foundation of the future South Platte Decision Support System (SPDSS) now being scoped by the State of Colorado. The enhancements in this proposal will provide a package of computer tools that the State of Colorado can consider incorporating as part of the SPDSS.