Title of Project: Building Bridges

Description of Research and GIS Applications

A Use of Site Planning Methodology and Geographic Information Systems to Aid in Completing a Boundary Analysis of Public and Private Land Uses Along a Segment of the White River National Forest Boundary

One of the many challenges of successfully managing public lands is created from pressures imposed by existing or proposed land use occurring on adjacent private lands. This interface between public and private land represents a complex mix natural resource, rural and urban uses, as well as being effected by the agenda and administrative processes put in place by the local government body in authority. In order to design and implement viable management strategies for these interface lands, the public land manager not only must possess a working knowledge of natural resource related fields, but also knowledge of rural and urban planning agendas and strategies embraced by the neighboring, affected local government.

The boundary analysis process documented in this paper was designed and implemented to provide the foundation information and trust-building component of a grant-funded project entitled Building Bridges. This project was aimed at improving communication, cooperation, and understanding between a steering committee made up of decision-level representatives of three Federal and State land management agencies, two counties, and six municipalities, which all shared stewardship roles within a selected study area. The design of activities and deliverables used performing this boundary analysis were heavily influenced by attributes of this steering committee, as well as by the goals and objectives outlined for the Building Bridges project. The boundary analysis consisted of using site planning methodology, supported by GIS technology, to design and facilitate activities which aided the Steering Committee members in locating areas along the boundary where conflict of opportunity for collaborative efforts might exist. Once these areas were located, a boundary analysis workbook, containing discussion and recommendations for possible future actions concerning these areas was distributed. The study area was located in a portion of the Blue River watershed in Summit and Grand county Colorado. This area contained a mix of land uses including; several ski resorts, low to high density residential, commercial, agricultural, and industrial. Land use planning and management on both sides of the public and private land boundaries are complicated by a wide variety of complex economic, social, natural resource, and population...
growth-related issues.
Map production and activity design for the boundary analysis process took approximately 2 months to complete, with the first activity being completed at the end of January 2001. From this date to present the entire boundary analysis process and deliverables were completed, and a follow-up meeting of the Building Bridges project team has been held. At this follow-up meeting, held July 13, the project team agreed to actively pursue collaborative efforts for eight areas which had been identified in, and selected from the boundary analysis process. If positive collaborative activities for these areas are implemented soon, this would equate to having formed eight individual collaborative efforts, among eleven separate agencies and jurisdictions, in less than 6 months (beginning from the Focus Group activity).

This paper is written, in part, for other GIS professionals who may be tasked with completing a boundary analysis for their agency or jurisdiction. With this audience in mind, some steps completed during the boundary analysis process are described in detail so that they may be repeated if desired.

My presentation will include a hardcopy of the workbook produced, in addition to, power point slides of the 40 some GIS map products produced and presented to the Steering Committee. I will provide my own laptop and flat screen monitor.