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AN ELECTRONIC PERFORMANCE SUPPORT SYSTEM (EPSS) FOR NATURAL RESOURCE PLANNING: MAKING THE LIMITS OF ACCEPTABLE CHANGE (LAC) SYSTEM INTERACTIVE

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ABSTRACT: End-users in academe, as well as in professional practice, are increasingly looking toward advances in distance education to improve learning opportunities for students and staff. The Internet has provided one medium for delivering information to global users in a dynamic environment. Unfortunately, the restrictions of the Internet (in terms of server connectivity, bandwidth type, and data processing capabilities, etc.) often limit the flexibility for delivering and working with large multimedia and interactive files. An alternative platform to the Internet is the digital video disk (DVD), which is capable of storing, delivering, and processing large pieces of information almost instantaneously and without the system requirements of the Internet. This presentation will demonstrate the application of an electronic performance support system (EPSS), delivered via DVD, to wilderness planning using the Limits of Acceptable Change (LAC) system. An EPSS is a computer-based training approach that provides integrated, on-demand access to (a) information (e.g., multimedia and statistical databases), (b) tools (i.e., productivity software, such as a word-processing document), (c) advice (a coaching facility that guides users through performing procedures and making decisions), and (d) learning experiences (i.e., interactive tutorials) (Gery, 1991, *ctd.* in Leighton, 1998). It enables a high level of job/task performance with a minimum of support from others, thus reducing the need for wilderness planners to attend expensive training sessions and be away from their job for extended periods of time. The LAC EPSS utilizes a “just-in-time,” real-world, and task-oriented approach to problem solving and guides wilderness planners through the nine steps of the LAC system in an interactive manner. The interactive tasks involve a series of feedback loops developed using empirical data of biophysical and social conditions (including, for example, vegetative conditions, soil erosion, campsite conditions, trail depth, etc.) and multimedia applications (i.e., digital video and photographs) of biophysical and social conditions. The LAC EPSS is demonstrated using the context of Raven Cliffs Wilderness Area in the southern Appalachian Mountains of north Georgia.

LITERATURE CITED

Gery, G. 1991. Electronic performance support systems: how and why to remake the workplace through the strategic application of technology. Ziff Institute. 303 pp. *Ctd.*, In: C. Leighton. 1998. <<http://online.sfsu.edu/~leighton/whatisepss.htm>>.