July 1, 1993

LCMR Final Status Report.

I. Continuing Education in Outdoor Recreation Management for Natural Resource Managers - Education 3

Program Managers:

David W. Lime & Dorothy H. Anderson

Department of Forest Resources

University of Minnesota St. Paul, MN 55108

(612)624-2250 and (612)624-2721, respectively

A. M.L. 91 Ch 254 Art. 1 Sec. 14 Subd: 5(e) Appropriation:

\$125,000

\$0

Balance:

This appropriation is to the University of Minnesota, Department of Forest Resources, to develop and implement an outdoor recreation shortcourse for natural resource planners and managers with outdoor recreation responsibilities.

B. <u>Compatible Data</u>: NA

C. <u>Match Requirement:</u> NA

# II. <u>Narrative</u>

This joint University-Department of Natural Resources (DNR) project calls for further development, implementation, and evaluation of an interdisciplinary professional development and training and education program for natural resource planners and managers with outdoor recreation responsibilities. Participants would be drawn primarily from various divisions of DNR, but interest exists from other state and federal agencies as well as from county government. Need for a recreation planning and management "shortcourse" is widely recognized in the natural resource community. There are at least 500 DNR employees with outdoor recreation responsibilities that could benefit from a program of this nature.

A limited pilot study currently was initiated for 30 DNR employees in Fall, 1990 by the University and DNR to develop such a program. A limited evaluation of the effort also is being implemented. Support for this cooperative effort is provided by the DNR and the University's Department of Forest Resources, Agricultural Experiment Station, and the Minnesota Extension Service.

## III. Objective

- A. Further develop and implement a training and education program for DNR (and other interested) natural resource professionals not able to participate in the 1990 pilot effort
- A.1. <u>Narrative:</u> Many more DNR employees can benefit from this program than is possible from the pilot effort. Funds to accelerate this effort are not expected to be available in subsequent years. Training manuals and further curriculum development also will be products of this objective.
- Procedures: A steering committee consisting of University and DNR staff will evaluate the 1990 pilot training session and develop a modified course curriculum for subsequent two-week programs. The course is intended to follow the "survey" approach, which is interdisciplinary and exposes participants to new concepts, models, and technologies that have direct application to outdoor recreation management. Course topics are expected to include interpretation, public involvement, biodiversity, ecological restoration, shifting trends in recreation, historical foundations of park and recreation management, geographic information systems, and making parks accessible to special populations. Instructors will include faculty from the University of Minnesota and other universities, consultants, practicing managers and researchers from public agencies, and State of Minnesota legislators. Each training session will be limited to 30 participants and will be selected by the steering committee. Participants will be a cross-section of professionals from DNR and other agencies.

# A.3. Budget:

## LCMR Funds Matching Funds

a. Amount budgeted: \$82,000 \$0
b. Balance: \$0 \$0

The second evaluation will look at individual sessions, instructors, session content, and session format.

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The third evaluation will measure any increased knowledge and awareness of subjects taught in the course. This evaluation also will assess whether participants have changed their minds about whether these subjects will be relevant in their careers and whether their preconception of the course changed after taking it. An evaluation of facilities and course arrangements will also be evaluated.

The fourth evaluation, six months after the course, will show whether knowledge gained in the course has been useful and relevant in the managers' jobs and careers.

#### V. Context

- A. State park management covers a diverse set of activities ranging from public relations and law enforcement to natural and cultural resource management. The diversity of job skills and knowledge needed, coupled with the ever changing political and social environment managers must work within, has left some managers with less than adequate training to do their jobs. Moreover, it has pushed managing agencies toward upgrading the skills of all resource managers at a time when budgeting scarce dollars for education and training is not popular. The training and education program described above is designed to upgrade park managers skills across the diversity of jobs for which they are responsible. In addition, the format of the training is such that, in the long run, it should save training dollars for agencies.
- B. To date an intensive, short-term comprehensive training and education course has not been available to natural resource managers. Long-term training at various academic institutions around the State has been available and will continue to be available for various aspects of park management. However, time and funds prevent most natural resource managers from taking part in long-term training.

Opposite long-term training has been short 1 to 3 day programs focused on a single natural resource topic that managers could take advantage. As with long-term training, time and funds permit very few managers from participating in more than one such training effort a year. Another drawback of such training is that it is generally so specific that it is difficult to see how it relates to other aspects of natural resource management.

The proposed shortcourse overcomes some of the drawbacks of long-term and short, topic specific training currently available. The proposed course permits training of large numbers of personnel on a variety of park management topics in a re' tely short time period. It also covers a wide array of the sand shows the interpance of issues across many park management topics. As such it

- will supplement the current training packages offered by the DNR for its natural resource managers.
- C. The training and education program outlined in this proposal has not previously been funded by LCMR. A pilot project similar to the one described in this proposal was conducted September 16 through September 28, 1990 using DNR and University of Minnesota funds. The intent of this project is to upgrade natural resource managers' skills now and in the future by establishing an ongoing training and education partnership between the University of Minnesota and various divisions of the DNR and other federal, state, county, and municipal agencies with natural resource management responsibilities. It is anticipated that funding beyond the FY92-93 biennium will be sought from LCMR to supplement funding from other sources.
- D. Financial support for the pilot program totaled approximately \$50,000. This work included activities in both FY 89-90 and 90-91. Support was provided by the Minnesota DNR and the University's Department of Forest Resources, Agricultural Experiment Station, and the Minnesota Extension Service (Tourism Center and Natural Resources Program).
- E. Biennial Budget System Program Title and Budget: Not available at this time.

### VI. Qualifications

## 1. Program Managers:

David W. Lime

Research Associate, College of Natural Resources, Department of Forest Resources, University of Minnesota; Unit Leader, National Park Service, Cooperative Park Studies Unit, University of Minnesota; and, staff member in University's Tourism Center.

Ph.D. Geography - Human Behavior, University of Pittsburgh, 1969
M.A. Geography - Recreation Resource Management, University of Pittsburgh, 1965

Prior to joining the University in 1987, Dr. Lime was a Recreation Research Project Leader and scientist for 20 years with the U. S. Forest Service, North Central Forest Experiment Station, located on the St. Paul Campus of the University of Minnesota. His research has focused on a variety of recreation management issues including visitor characteristics, behavior, and use patterns; carrying capacity; the role of information to modify use; the role of wildlife in recreation satisfaction; and methods to assess trends in recreation participation. Dr. Lime has chaired and co-chaired a variety of conferences, workshops, and professional development activities associated with outdoor recreation resource management. This work has included formal evaluations of their content and relevance to applied resource management.

Dorothy H. Anderson Assistant Professor, College of Natural Resources, Department of Forest Resources, University of Minnesota

Ph.D. Natural Resources and Human Behavior, Colorado State University, 1980 M.A. Land Use Planning - Geography, University of Minnesota, 1976

Dr. Anderson's interests and expertise range from studies of technology transfer between natural resource managers and researchers, to barriers to change in public resource management organizations, to evaluation of training and education packages for natural resource managers, to understanding human behavior and response in a variety of natural resource environments. She has more than 16 years of research and administrative experience with federal, state, and international organizations engaged in natural resource planning, management, and research.

Drs. Lime and Anderson will share equally in overseeing work conducted under Objectives A and C. Dr. Anderson will be the primary program coordinator for work conducted under Objective B.

## 2. Major Cooperators:

A) William Morrissey
Director, DNR Division of Parks and Recreation

B.S. College of Forestry, University of Minnesota, 1971

Mr. Morrissey has been with the DNR since 1973. He has served in a variety of capacities including Grant-In-Aid Coordinator for the Division of Parks and Recreation, Assistant Trail Coordinator, Trail Planning Supervisor with both the Office of Planning and Trails and Waterways Unit, Forest Planning Supervisor, and Regional Administrator in the Rochester Region. Prior to joining the DNR, he was Assistant to Director of Undergraduate Programs at the University of Minnesota. Mr. Morrissey was a full partner in developing the 1990 pilot program for this shortcourse. His primary role in this project will be to participate in the accomplishment of Objectives A., B., and C.

# VII. Reporting Requirements

Semiannual status reports will be submitted not later than January 1, 1992, July 1, 1992, January 1, 1993 and a final status report by June 30, 1993.

#### 1991 NON-RESEARCH PROJECT ABSTRACT

FOR THE PERIOD ENDING JUNE 30, 1993

This project was supported by MN Future Resources Fund (MS xxx.xx)

TITLE: Continuing Education in Outdoor Recreation

Management for Natural Resource Managers

PROGRAM MANAGERS: Drs. David W. Lime and Dorothy H. Anderson

ORGANIZATION: University of Minnesota

LEGAL CITATION: M.L. 91 Ch 254 Art. 1 Sec. 14 Subd: 5(e)

APPROP.AMOUNT: \$125,000

#### STATEMENT OF OBJECTIVES

(1) develop and implement a training and education program for DNR and other professionals,

(2) develop and conduct in-depth evaluation of the quality and relevancy of the program, and

(3) explore opportunities to develop partnerships with other organizations in future programs

### **OVERALL PROJECT RESULTS**

The intent of this project was to upgrade natural resource managers' skills now and in the future by establishing an ongoing training and education partnership between the University and various divisions of the MnDNR and other agencies charged with natural resource management responsibilities. The shortcourse design followed a "survey" approach--meaning it was interdisciplinary and exposed participants to new concepts, models and technologies; all of which had direct on-the-job applications. Four, two-week training sessions were conducted--Fall, 1991; Spring, 1992; Fall, 1992; Spring, 1993. Over 140 trainees participated in the courses. Participants were professionals from the Department of Natural Resources (primarily the Division of Parks and Recreation), National Park Service, U.S. Army Corps of Engineers and other persons working within the outdoor recreation resources field. Working sessions covered a diversity of topics, such as trends in leisure, biodiversity, ecological restoration, public involvement, use of social science data in management, and public/private partnerships.

Participants completed questionnaires before, during and after the course to provide feedback on the quality and relevancy of the activities. They also participated in a two-day evaluation workshop six months after the course. Evaluation results indicate that perceived knowledge increased for all topics from before the course to immediately afterwards--and from before the course to six months after. Results also suggest that knowledge of topics stayed with participants over the long run, even though some of the participants have had little chance so far to put the knowledge to use on the job. Participants cited organizational barriers, lack of clear divisional goals, instability of funding, differing priorities in the organization, resistance to change, and little incentive for trying something new, which impeded their ability to apply new knowledge.

### PROJECT RESULTS USE AND DISSEMINATION

A paper at the First International Symposium on Perspectives on Parks, Politics & Policies, East Lansing, MI on Sept. 27-28, 1991 by Dr. D. Anderson et al. The following reports: Anderson, D.H., et al. 1993\Outdoor Recreation Management in the 90's: A continuing education shortcourse. Final Report to The LCMR, 111 pp; Dybiec, C. 1992\Effects of training on job performance of outdoor recreation professionals. Masters thesis, University of Minnesota.