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REMOTE SENSING APPLICATIONS FOR

IDENTIFYING POTENTIAL RECREATION RESOURCES

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ABSTRACT

The applicability of utilizing machine processing (LARSYS) of LANDSAT-1 data for identification of potential recreation resources was investigated. A 6,560 acre tract of land in Geauga County, Ohio, which contained areas identified in the 1971-1977 Statewide Plan for Outdoor Recreation in Ohio as having potential for outdoor recreation, was selected as the study area. Aerial photographs, field inspection data and land use maps prepared by computer analysis of LANDSAT data were used in this study.

The research was divided into four phases:

1. Identification and evaluation of potential outdoor recreation areas by using either aerial and field data or machine processed data.

2. Qualitative analysis of machine processed data of the entire study area.

3. Quantitative analysis of machine processed data of the entire study area.

4. A qualitative and quantitative analysis of the machine processed data for specific sites within the study area.

The land use maps produced by computer aided analysis techniques were evaluated against land use maps prepared by using the aerial photography and field observation data. Two measures were utilized to evaluate the accuracy of four classes (forest, agriculture, water and urban). Total acreage and individual point by point comparisons were made for both the entire study area and for delineated potential recreation areas.

The results indicate that machine processing (LARSYS) of LANDSAT-1 data accurately represents the general land use character of the study area and of the delineated potential recreation areas. However, results were somewhat less accurate when denoting exact land uses on a point by point basis.