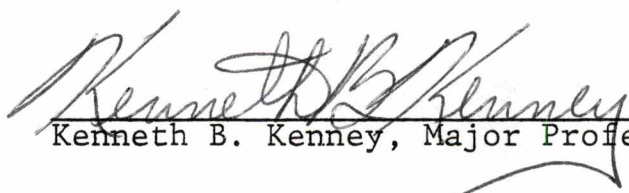
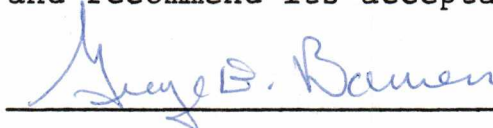


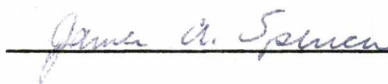
To the Graduate Council:

I am submitting herewith a thesis written by Sally Tate Hart entitled "Planning for Lands Adjacent to Federal Recreation Areas: A Forest Service Experience in Virginia." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science in Planning.

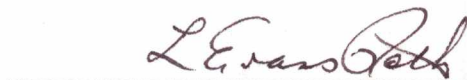

Kenneth B. Kenney, Major Professor

We have read this thesis
and recommend its acceptance:





Accepted for the Council:



Vice Chancellor
Graduate Studies and Research

PLANNING FOR LANDS ADJACENT TO FEDERAL RECREATION AREAS:
A FOREST SERVICE EXPERIENCE IN VIRGINIA

A Thesis
Presented for the
Master of Science in Planning
Degree
The University of Tennessee, Knoxville

Sally Tate Hart
March 1982

3057963

ACKNOWLEDGEMENTS

Although I am indebted to numerous individuals for their contributions to this thesis, I wish to express sincere thanks to a few specific individuals. Both Tom Taylor and Jimmy Wallace of the Mount Rogers Planning District Commission were extremely helpful in providing insight about the case study. Additionally, Mr. Charlie Blankenship of the Forest Service was an invaluable source of information and I appreciate his time and patience through long interview sessions.

I thank Dr. Ken Kenney for his advice and suggestions, as well as the other two members of my committee, Mr. James A. Spencer and Mr. George Bowen. Finally, I am grateful for the support and encouragement of fellow students and friends--something every thesis author needs. Without them, I most certainly would have been less fortunate.

ABSTRACT

Recreation-oriented federal resource units such as national parks, forest, and recreation areas often attract private development opportunities at their borders. Federal personnel and land managers responsible for these lands are increasingly being confronted with problems associated with adjacent land development. They are chiefly concerned with impacts of the outside development on resources within federal boundaries. On the other hand, local communities adjacent to these federal lands may experience unplanned and uncontrolled growth and other related impacts from the federal development. The presence of dynamic land use impacts and interrelationships between the federal units and adjacent communities demonstrate a need for coordination with local governments in planning for federal recreation areas.

Although literature research was conducted to explain this land use planning problem, this thesis investigates the problem through a case study of the Mount Rogers National Recreation Area (NRA) in Virginia and its planning process. The planning process undertaken by the Forest Service, the administering agency for the NRA, was initially intended to be a coordinated one that considered not only the federal lands, but adjacent private lands as well. To study this particular case, interviews were conducted with Forest Service personnel, regional planners,

and local government officials. The interviews were constructed to address the steps of the planning process and the actual evaluation of the process was based on particular "coordination elements" within these steps.

This study found that the Forest Service was unsuccessful in adapting its planning program to include "adjacent lands coordination." Many elements of coordination were either inadequate or totally absent. The result was widespread dissatisfaction with the planning process and considerable criticism of the Forest Service's proposed plan for the National Recreation Area from local officials and regional planners. In its effort, the Forest Service encountered serious barriers in attempting to provide consideration of private lands and local communities.

This study essentially proposes a coordination strategy that is implemented through the federal agency's planning process. Although responsible for initiating this coordination, the federal agency cannot solely provide the comprehensive planning needed for adjacent lands. Workable intergovernmental approaches between the federal agency and local governments are necessary to confront barriers to coordination and to successfully deal with adjacent land use problems.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Statement of the Problem	1
Literature Review.	4
Need for the Study	6
Purpose and Scope of the Study	7
Selection of the Case Study.	8
Methodology.	10
Organization of the Study.	12
II. LAND USE INTERRELATIONSHIPS AND CROSS-IMPACTS BETWEEN FEDERAL RECREATION LANDS AND ADJACENT COMMUNITIES.	14
Development Stimulation on Adjacent Land	14
Economic Impacts on Adjacent Communities	17
Social Impacts on Adjacent Communities	18
Environmental Impacts on Adjacent Com- munities.	19
Environmental Impacts on Federal Recre- ation Lands	21
Land Use Demands on Federal Recreation Lands	23
Implications for Planning.	24
III. THE FOREST SERVICE: A FEDERAL LAND AGENCY AND ITS POLICIES CONCERNING ADJACENT LAND.	27
Origins of the Forest Service.	27
Multiple Use and the Role of Recreation.	28
Land Acquisition	33
Payments-in-Lieu-of-Taxes.	36
Planning and Coordination With Local Governments	38
Conclusion	42
IV. HISTORICAL BACKGROUND AND DESCRIPTION OF MOUNT ROGERS NATIONAL RECREATION AREA.	44
Congressional Authorization.	44
Land Area and Location	45
Present Scale of Development	46
Administration	48
Adjacent Area.	48
Early Plan Development	50
Unit Planning.	53
Current Planning.	56

CHAPTER	PAGE
V. ANALYSIS OF THE FOREST SERVICE PLANNING PROCESS AND ITS COORDINATION WITH COMMU- NITIES ADJACENT TO THE NRA.	58
Introduction.	58
Problem Identification and Analysis . . .	60
Goal Formulation.	67
Data Collection	71
Evaluation of Alternatives and Plan Selection.	78
Implementation.	84
Continual Evaluation.	91
Current Involvement of Local Officials. .	93
Summary and Conclusions	97
Future Outlook and Recommendations. . . .	108
IV. GENERAL CONCLUSIONS ABOUT "ADJACENT LANDS PLANNING"	115
Case Study Implications and General Conclusions	116
Areas for Future Research	123
LIST OF REFERENCES	126
VITA	134

CHAPTER I

INTRODUCTION

Statement of the Problem

In the past few years, considerable concern has been expressed over an increasing number of threats endangering our federal resource lands.* The dangers threatening these lands originate from sources outside the federal units as well as internally. One of the major threats recognized by the federal land agencies is that of land development outside the boundaries of the lands administered by these agencies. Federal resource lands that were once remote and surrounded by wilderness are now being gradually besieged by development pressures at their borders.

External threats jeopardize land from the oldest, most popular national parks to national forest wilderness areas and large Bureau of Land Management holdings in the West. The types of development pressures include "gateway" commercial establishments, nearby second-home growth, and industrial development, often located at a distance

*For purposes of this thesis, the terms "federal resource lands" or "federal resource units" refer to all federally-owned parks, forests, rangeland, wildlife refuges, and recreation areas managed by several different agencies, including the National Park Service, the Forest Service, the Bureau of Land Management, the Fish and Wildlife Service, and the Army Corps of Engineers.

from the federal land. Although the federal agencies are concerned about the impact of this development on federal land resources, they have no authority to regulate land use beyond their perimeters.

The issue is a two-sided one, since the development being experienced in adjacent areas is often attributed to the presence of the federal resource land. This is particularly true of recreation-oriented resource lands where commercial activity springs up to serve visitors to the area, or second-home development occurs outside the federally-owned land. The patterns of growth in peripheral communities may be significantly altered by the presence of the federal unit, as well as by its management policies and programs. Increased tourism generated by the federal land provides substantial benefits to the local economy; however, the federal recreation land may actually threaten the local economy and character of the adjacent community by spurring development in rural areas that are unprepared for rapid growth. In turn, this uncontrolled growth and development negatively affects the aesthetic resources of the federal lands.

In the past, federal land agencies have acted to prevent adjacent development by acquiring specific properties that lie outside federal ownership, yet inside established boundaries for the federal unit ("inholdings"), as well as tracts that border on the federal boundaries (Sax, 1980).

Obviously, however, this solution is both costly and ineffective; if it is the presence of the federal land that enhances development opportunities, those opportunities will continue to exist on remaining adjacent lands in private ownership. The federal agency cannot simply continue to purchase land to prevent incompatible development and its related impacts. It must attempt to address this adjacent land use problem through methods other than land acquisition.

Recently, federal agencies have begun to emphasize the need for better coordination with state and local governments in planning for these adjacent private lands. Since the local governing bodies have the authority to control land use and development on these lands, a coordinated planning effort with local governments is essential in order to prevent or mitigate adverse impacts and land use problems. A constant interrelationship exists between federal lands and their surrounding communities, as federal policies and programs affect adjacent areas, and local activities have impacts on federal resources. Without organized planning and the implementation of effective land use controls, the rash of undesired development will continue to invade small, peripheral communities, as well as threaten the natural and cultural resources of our federal lands.

Literature Review

Although not a new problem by any means, the issue of land development adjacent to federal resource lands has been recently recognized in the literature, receiving documentation in several published reports. Both the National Parks and Conservation Association (NPCA) and the National Park Service have singled-out land development as a major threat to national parklands. In late 1978, the NPCA surveyed all national park units and found that commercial and residential development outside the park units was most frequently viewed by park superintendents as an incompatible activity adjacent to parklands (NPCA Magazine, 1979a, p. 5). The Park Service itself was called on by Congress to investigate such perceived threats to the park system. This study resulted in the State of the Parks report in May 1980 which identified a broad spectrum of threats to national park resources. The report ranked land development as the most prevalent problem, classifying it as a danger to the aesthetic resources of the parks.

Some literature exists that focuses on the regulation of adjacent private lands from a federal perspective. Sax (1976), for example, addresses the problem of land development on private lands adjacent to national parks, but his research deals specifically with the legal question of the National Park Service's responsibility and

control over that development. It does not discuss planning and coordination between the federal agency and local communities, but instead suggests that the federal agency pursue more direct control of these private lands through Congressional authority.

In addition to the recent material discussing the problem from the federal standpoint, other research has addressed the "other side of the coin" by studying socioeconomic and land development impacts of federal resource lands on nearby communities. This literature consists primarily of site-specific plans and reports that assess impacts. Since the passage of the National Environmental Policy Act (NEPA) in 1970, there has been a proliferation of documents that assess environmental impacts of federal projects including federal resource units. However, little related research has been done to investigate planning approaches for mitigating or preventing adverse impacts caused by federal resource lands.

The Conservation Foundation provided the most comprehensive research on the issue in its 1979 report by William Shands, Federal Resource Lands and Their Neighbors. This study recognizes the interrelationships between federal lands and local communities, and documents the "cross-impacts" between the two. The author calls attention to the need for solutions, suggesting several areas of policy and research concerns--one of which is coordination and

planning. The report, however, places much emphasis on the responses of federal land managers and other experts. In some respects, it neglects the "local side" of the issue by not interviewing local officials who certainly would have mutual interest in a coordinated planning effort.

Need for the Study

At least two federal land agencies, the Forest Service and the Bureau of Land Management, have recently been more attentive to adjacent lands and have involved local communities in their planning efforts. The Forest Service has attempted the coordination of its plans with state and local plans, as mandated by the National Forest Management Act of 1976, yet such efforts often have not been successful in mitigating land use problems (Shands, 1979b, p. 13).

One reason for this common lack of success is that conflicts exist in attempting to meet both national and local goals through a planning process. Other factors such as negative local attitudes toward planning or a lack of federal resources for planning may hinder the success of a coordinated process. In order to determine the problems associated with coordination and suggest possible solutions, there is a need for investigation of the planning process used by federal agencies in coordinating their policies and plans with adjacent communities.

Purpose and Scope of the Study

The intent of this research is to analyze and evaluate one experience in which a federal agency has attempted to coordinate its planning with local communities. By studying one case, the Mount Rogers National Recreation Area in Virginia, an examination of the Forest Service planning process has been made, specifically addressing how this process incorporates local concerns and deals with potential impacts of policies and plans on surrounding communities. Additionally, there has been emphasis on determining what factors in this case serve as barriers to coordination. The study also includes recommendations for improving that process and attempts to provide insight for other federal units and their neighbors.

To address all federal lands is difficult due to the wide variety of lands classified as such. The type and magnitude of development pressures and problems in land use planning in adjacent communities may differ depending on the type of federal unit, as well as its size and location. This research is concerned with what may be termed "federal recreation lands," which are federally-owned resource lands that offer active recreation opportunities to the visitor, such as national parks and recreation areas as opposed to wilderness areas and wildlife refuges. This thesis focuses on a National Recreation Area that is administered by the Forest Service.

Therefore, the study is limited to looking at specific Forest Service policies and to the Forest Service's involvement in coordinated planning. The research findings, although intended to have application to similar federal recreation areas, discuss specific factors that are unique to the case study.

Although this thesis discusses various land use interrelationships and cross-impacts that can occur between federal recreation lands and their neighbors, it chiefly emphasizes the stimulation of development and subsequent problems that affect small communities adjacent to or in close proximity to federal lands. However, there has been no attempt in the case study to quantitatively assess these development impacts or predict future impacts. Rather, this case study critiques efforts that have been made by the Forest Service to deal with these impacts through a coordinated approach with local governments. It is an assumption of this paper that due to such land use interrelationships and cross-impacts, a coordinated intergovernmental approach should be taken in planning for federal recreation areas.

Selection of the Case Study

The reason for selecting this particular case study was largely the relevance of its situation to the research topic and the perceived "typicality" of the case. In establishing this federal recreation unit, Congress proposed

a major recreation complex in a mountainous area of southwestern Virginia. Designated as a National Recreation Area, it was created in part to promote the development of the surrounding region. Especially due to the rural nature of the surrounding area, significant land use issues arose regarding the development plans for the National Recreation Area (NRA) and their impact on adjacent private lands and small communities.

One of the first policies established by the Forest Service in planning for the NRA was that private lands within the NRA and other adjacent lands would be included in the planning process (USDA, 1968, p. 58). Later, the Forest Service was criticized for neglecting to sufficiently consider adjacent lands and local governments in its draft unit plan and environmental impact statement. Choosing this particular case study provided the opportunity to study and evaluate the Forest Service planning process for the NRA, its possible shortcomings as a "coordinated process" involving local communities, and the particular barriers to coordination that prevented the Forest Service from being successful in its effort. It is hoped that this analysis of a "typical case" could reflect on other similar situations. Other factors such as the convenient location of the study area and the author's general familiarity with the region also contributed to the case study selection.

Methodology

The initial part of this thesis involved a descriptive research approach using available literature to address the land use impacts and interrelationships between federal recreation areas and adjacent communities. Literature research was also conducted to determine Forest Service policies (Chapter III), although personal interviews with Forest Service personnel contributed to this material. The major portion of the research, however, was the case study and field investigation of Mount Rogers National Recreation Area in Virginia.

In order to obtain an understanding of the Mount Rogers case, a series of personal interviews was conducted with various people involved in the planning process for the NRA. The chief sources included four Forest Service officials and two regional planners at Mount Rogers Planning District Commission in Marion, Virginia. Interviews were also conducted with three county administrators, one county planner, and one town mayor whose jurisdictions are adjacent to the NRA. Recommended as knowledgeable sources by planners at the Planning District Commission, these persons had served in their positions for several years and therefore were familiar with the NRA development.

The format of these interviews was informal taped discussion. Additionally, ten brief telephone interviews

were conducted with elected supervisors and planning commissioners from surrounding counties, and two former Forest Service officials were contacted by written correspondence. Documents and written materials available from both the Forest Service office in Roanoke and the regional planning agency were also examined. However, because little has been written regarding the NRA and its planning history, most of the information provided in the case study chapters (IV and V) is derived from the personal interviews. These interview sources are cited within the text and listed in the bibliography.

The interviews addressed questions about the Forest Service planning process, the actors involved, and the problems experienced in attempting to coordinate plans between the NRA and local communities. In order to formulate an evaluative analysis, this research took the liberty of establishing some general criteria for evaluation which are described more fully in Chapter V. Although it provides general history and background of the case study in Chapter IV, this thesis focuses primarily on the actual planning process undertaken by the Forest Service and evaluates the stages in that process.

Although this critical analysis was organized around each step in the process, it was geared toward answering some broad questions about the Forest Service effort:

- 1) What planning has the Forest Service done to address issues of adjacent land use?
- 2) How has the planning process incorporated local concerns and goals?
- 3) How involved were local officials in the planning process?
- 4) What have been shortcomings of this coordination effort?
- 5) What factors have served as barriers to successful coordination?
- 6) What improvements could be made in the Forest Service planning process for the NRA to insure more coordinated action?

The information collected was used to evaluate the Forest Service's over-all effort in planning for adjacent lands and to determine what may have been significant obstacles to a coordinated process between the federal agency and local governments. The findings contributed to the formulation of some recommendations for the Forest Service, as well as general conclusions about "adjacent lands planning."

Organization of the Study

The remainder of the thesis consists of five chapters. Chapter II expands on the problem statement by giving an overview of the interrelationships and cross-impacts

between federal recreation lands and adjacent communities. Chapter III outlines Forest Service policies, especially those pertaining to adjacent lands, to provide background information for the case study. The major portion of the research is contained in Chapter IV and V. The fourth chapter provides a historical overview and description of the Mount Rogers National Recreation Area, including the chronological background of planning for the federal recreation unit. Chapter V is the actual analysis and evaluation of the Forest Service planning process for the NRA and includes recommendations for more effective coordination. The final chapter, Chapter VI, contains a general summary and conclusions about "adjacent lands planning."

CHAPTER II

LAND USE INTERRELATIONSHIPS AND CROSS-IMPACTS BETWEEN FEDERAL RECREATION LANDS AND ADJACENT COMMUNITIES

The presence of federally-owned land can greatly influence land use decisions in the surrounding community. Development may be constrained due to the lack of private land available for expansion. However, federal land that is recreation-oriented often serves to stimulate outside development (Shands, 1979c, p. 11). The peripheral communities may welcome economic benefits from this increased activity, but are forced to cope with related economic, social, and environmental problems caused by development. These impacts on adjacent land have a "repercussion effect" on the federal land, accentuating the interrelated nature of land use and activity patterns between federal recreation lands and their neighbors.

Development Stimulation on Adjacent Land

It is often evident that stimulation of land development is a major impact that a federal recreation unit can have on adjacent land. The nature of such development is usually reflective of the types of activities on the federal land and the size of the particular federal unit. Federal lands that offer intensive recreation opportunities, particularly national parks, attract visitor-oriented commercial development (Shands, 1979a, p. 36). This

development may occur in the form of a "gateway" town at the edge of the federal land, or strip, scattered development along entrance highways. The function of such a community is to provide necessary services excluded from the federal land. It is often economically dependent on the revenue and employment generated by the federal unit, although in some cases, "gateway" communities have become attractions in themselves, such as Gatlinburg, Tennessee outside the Great Smoky Mountains National Park (Schmudde, 1976, p. 49).

Less-intensive types of recreation facilities, because they attract smaller concentrations of people, do not usually demand major commercial support service. Federal units such as national forests which generally offer less-developed recreation facilities, often stimulate more residential development rather than commercial growth (Shands, 1979a, p. 36). This residential growth is frequently "second-home development" which can refer to a wide range of development types from "unimproved raw land subdivisions to resort development with condominiums" (CEQ et al., 1976, p. 3). Generally, it means any seasonally-occupied vacation homes as opposed to permanent residences.

Of course, it is difficult to assess whether this residential development is actually attributable to the federal unit itself, or merely to the scenic resources of the area. Nevertheless, areas adjacent to federal holdings,

because of their proximity to recreational and aesthetic resources of the public land, do become more desirable, more valuable, and consequently more profitable for second-home development (Shands and Woodson, 1974, p. 12). Particularly affected are the privately-owned inholdings, although parcels of land outside the federal unit are also subject to land value increases and speculation activity.

Undoubtedly, management policies and specific program decisions made at the federal level can have direct impacts on private land use. For instance, the general policy that excludes or limits commercial development within federal boundaries gives preference to private development at the entrances. More notably, a federal decision to develop an intensive-use recreation facility such as a ski area will more than likely increase the level of commercial and residential activity in communities just outside the borders of that development. In addition, particular land use and transportation patterns within a federal unit will often determine that some outside communities are affected more than others. This development stimulation phenomenon has subsequent impacts on the economic, social, and environmental fabric of adjacent communities.

Economic Impacts on Adjacent Communities

For the most part, local interests have welcomed the establishment of a federal recreation unit with the anticipation of economic benefits from increased commercial and residential activity (Shands, 1979a, p. 31). In fact, Congressional authorizations for new units have included economic development of the region as a stated purpose for establishment in order to receive political support (Tremblay, 1980). Economic and fiscal difficulties arise, however, when the community begins to experience growth pressures and to suffer adverse impacts from this growth.

By stimulating development in peripheral areas, federal recreation lands affect the local revenue base. Increased sales from commercial activity, higher land values, and increased employment opportunities improve the community's financial standing. Often, however, this business activity may be highly seasonal in nature, and therefore not especially healthy to the local economy. At the same time, the demand for increased public services and facilities to support new development places strains on local finances.

Since federal lands are exempt from property taxes, jurisdictions with large amounts of public land may have limited financial capabilities (Prost, 1979, p. 15). The provision passed by Congress in 1976 requiring payments-in-lieu-of-taxes was a federal response to this problem,

and primarily affected those counties that contain federal land within their boundaries. (See Chapter III, p. 36). Even with this legislation, localities continue to feel that they suffer a revenue loss because of federal land ownership (Shands, 1979a, p. 35). Whether they are perceived as positive or negative, these economic impacts on adjacent land are undoubtedly of crucial importance to local jurisdictions.

Social Impacts on Adjacent Communities

An additional problem blended with economic impacts is the social impacts of federal recreation lands on adjacent communities. As the federal lands and nearby commercial establishments attract tourists, increased problems are experienced on private property, such as trespassing, theft, and vandalism. Owners of vacation homes are frequently subjected to such crimes (Shands, 1979a, p. 40). The continuous flow of outsiders through the area tends to disrupt the established social pattern of interaction in rural communities.

At the same time, a federal recreation unit disrupts land ownership patterns. Native residents may be displaced by federal acquisition of private land (especially if the federal agency has been granted the authority to condemn land). In addition to directly displacing residents, federal recreation projects inevitably cause increased land values (Drucker, 1972). As surrounding

property and inholdings increase in value, local residents must face higher taxes and may be forced to move. This breeds resentment among the native residents toward both the federal agency and the newcomers who move to the area. Problems of tax delinquencies and trespassing may also arise because many of the new landowners are outside investors, rather than residents (Mosena, 1972). In short, the entire social character of the surrounding area is affected by the federal recreation lands.

As new residents move into the area, new attitudes and values influence local land use. Conflicts often arise between the traditional long-term residents, and the new residents; as the traditional owners tend to value the economic productivity of the land and the new owners are more interested in the aesthetic and environmental values. The outsiders, most of whom have recently moved from more urbanized areas, generally wish to preserve the character of the area. On the other hand, the native residents, having experienced past economic decline, tend to welcome change and development (Healy and Short, 1979, p. 306). These conflicting values serve to confuse land use issues in communities adjacent to and affected by federal recreation lands.

Environmental Impacts on Adjacent Communities

Small communities adjacent to federal lands are susceptible to environmental problems of water pollution,

erosion and flooding, and aesthetic degradation from increased development. The lack of planning and land use controls in rural areas adjacent to federal lands often contributes to these adverse environmental impacts. The recent "boom" in recreational land development in the 1970's has had an "urbanizing impact" on many rural areas, but local governments have lacked the understanding and tools to deal with this land use problem (Mosena and Popper, 1973).

Recreational lot and second-home development is a particular problem which creates critical environmental consequences for the adjacent communities. Because it usually occurs in areas of outstanding natural and scenic attraction, second-home development presents more acute problems than permanent subdivisions. The development sites may be mountainous, steep slopes, or fragile coastal areas extremely susceptible to ecological damage. Because they are seasonal, and often developed for investment purposes, their "design and development practices may be inferior to those that characterize the conversion of land for urban use" (Burby, 1979, p. xiv). In addition, rural service systems for water and sewage treatment may be undeveloped or totally absent, and streets may be haphazardly planned, uncompleted, or unmaintained. Without proper regulations and controls, residential and commercial development becomes a greater threat to the natural environment of these surrounding communities.

Environmental Impacts on Federal Recreation Lands

At the same time, these environmental problems caused by uncontrolled development are major impacts that reverberate from adjacent lands, endangering water, wildlife, and aesthetic resources of nearby federal lands. Adjacent development, particularly residential development, creates severe impacts on downstream resources. Both septic seepage and sedimentation that occur with new development affect water quality on federal lands downstream. Ineffective waste treatment for residential subdivisions is often a prevalent problem. The modification of land itself from clearing and grading "increases sedimentation and erosion, which in turn affects water quality in streams and produces ecological and hydrological changes" (Burby, 1979, p. 3). Other water-related problems such as flooding, landslides, and overpumping of groundwater due to land development can affect nearby federal resource lands.

Water pollution problems also endanger wildlife on federal resource lands. The siltation of streams and river contaminants damage waterfowl and fish habitats. The actual destruction of habitats may result from the development of marshlands and the subdivision of areas that serve as winter game ranges. Even air pollution from urban land uses has been perceived as having an impact on wildlife (Shands, 1979a, p. 20).

Although the aesthetic impacts of adjacent land development on federal lands are not as measurable as water quality or wildlife population, they are more readily perceived by visitors to the federal lands. "The effect of external activity on a unit's overall visual or scenic quality represents an important adverse impact to federal lands" (Shands, 1979a, p. 21). Aesthetic degradation usually occurs when there has been extensive removal of vegetation and construction that affects scenic vistas (Shands and Woodson, 1974, p. 14). Commercial development, especially strip development, is notorious for its obtrusive appearance outside federal recreation units. Low-quality construction, flashy signs, and a lack of uniformity of architectural style are major elements contributing to this visual blight. Smaller visual intrusions associated with land development, such as power-lines, random billboards, and road construction, also negatively affect the aesthetic quality of federal lands.

Of course, these environmental problems threatening water, wildlife, and aesthetics are not unique to federal recreation lands. Because federal recreation units attract such development, however, environmental impacts experienced by adjacent communities are actually indirect effects of the federal lands. In turn, environmental conditions in adjacent areas have off-site impacts on nearby federal land, causing land development to be both a result of and a threat to federal lands.

Land Use Demands on Federal Recreation Lands

It should be recognized that not all adjacent development is attributable to the federal recreation unit. Increasingly, nearby small cities and rural communities that are not economically dependant on the federal land are growing and expanding. Factors such as new highways and the decentralization of industries away from the large cities are causing a trend toward non-metropolitan growth. This growth is placing increasing demands on the federal land resources. "Many federal units are under pressure to make land available for uses that fall outside...those specifically mentioned in authorizing statutes, " such as community parks, landfills, utility corridors, and facilities for sewer and water systems (Shands, 1979a, p. 25).

This problem is heightened in the case of new federal units in populated areas where available land for such community uses is severely limited. In rural communities where few resources are available to provide recreation facilities, local residents often view the federal unit as responsible for providing local benefits, such as community parks (Shands, 1979a, p. 32). Local activities and community needs which affect local land use demands have subsequent impacts on nearby federal lands. Pressure for incompatible land uses experienced by federal units may adversely affect federal land resources.

Implications for Planning

Federal recreation lands and their surrounding neighbors are inextricably tied to each other. These federal lands cannot exist in isolation from the outside communities, nor can residents and local governments ignore the significance of the federal land to their community. Land use in a federal recreation unit affects the local communities, and adjacent activity has impacts on federal land resources.

More importantly, federal decisions can have impacts on adjacent lands that subsequently affect federal land resources. Because of this phenomenon, a federal agency must logically incorporate the "adjacent area" in its planning process. It should consider the effects of adjacent activity, as well as the impacts of its actions on land use in surrounding communities.

Of course, local communities themselves need to realize their linkages to nearby federal lands. Local land use planning should attempt to maximize the beneficial impacts from the federal recreation lands while minimizing the adverse effects. The local planning process should be coordinated with the federal agency's planning program; to carry out planning on two isolated levels of government would be ineffective.

Organizing a coordinated planning process that would incorporate adjacent communities becomes difficult in

rural areas where there is little citizen organization and local governments lack planning resources and tools. A study done by Montana State University in 1976 and mentioned by Shands (1979a, p. 52) found that local governments do not have the resources or expertise to "mount successfully a comprehensive assessment/planning effort" for a federal recreation project. In such cases, therefore the responsibility for initiating such an effort seems to fall on the federal agency.

The federal agency, through its established planning process, can provide the vehicle for an "extended" planning approach that would involve local communities and their governments. Although its authority is restricted in terms of implementing land use controls, the federal agency can adapt and modify its planning program to recognize adjacent land use problems, consider local goals and objectives, and evaluate impacts on adjacent land. Basing federal land use decisions on these impact assessments would help alleviate problems experienced by those rural communities that lack sufficient land use regulations. Likewise, it would lessen the adverse consequences that return to "haunt" the federal land agency in the form of land use conflicts and endangered resources.

Recognizing that their policies and programs may negatively affect peripheral communities and that these communities often lack the resources to prevent these adverse

impacts, federal land agencies should take the initiative in a coordinated planning process. The Shands report (1979a, p. 42) asserts:

The prevention and resolution of adjacent land conflicts cannot be separated from the federal land managers' basic responsibility for managing and protecting the public's land.

Especially due to the "repercussion effect" of policy decisions on federal land resources, federal agencies have to recognize the importance of planning for adjacent lands, and the necessity of coordinating actions with local governments that have jurisdiction over those adjacent lands.

The area surrounding federal recreation lands may often include lands owned by other federal and state agencies, which expands the problem of coordination to include the bringing together of various entities. Another facet of coordination is the need to provide effective public participation within the land use planning process. This research deals specifically with the coordination of the federal land use planning process with planning and decision-making at the local government level and in a regional context. It does not attempt to examine coordination with state and federal agencies or the "public participation" facet of a coordinated process. To provide background information for the case study, the following chapter examines the legal and administrative role that the Forest Service has taken in terms of its involvement with adjacent lands and local governments.

CHAPTER III

THE FOREST SERVICE: A FEDERAL LAND AGENCY AND ITS POLICIES CONCERNING ADJACENT LAND

As has been mentioned, federal land policies affect adjacent communities; these may be policies that directly apply to private lands, such as land acquisition procedures, or those that deal with internal management but indirectly influence adjacent land use and nearby communities. In order to provide some background for the case study of Mount Rogers National Recreation Area, located within the Jefferson National Forest in Virginia, it is necessary to introduce Forest Service policies that concern adjacent private lands, as well as provide some historical explanation behind the development of these policies. Since the Forest Service has wide responsibilities regarding resource protection, it should be acknowledged that this discussion focuses particularly on the recreation resource of the national forest system.

Origins of the Forest Service

A legislative act passed in 1891 authorized the establishment of "forest reserves" from the public land domain, but it was not until 1897 that the use and administration of these reserves was addressed in the Forest Management Act (also referred to as the Organic Administration Act of the Forest Service). The act specified that "the reserves

were to be administered to improve and protect the reservations, aid in water flow, and assist in furnishing timber" (Robinson, 1975, p. 7). The Forest Service, established in 1905 as a division within the Department of Agriculture, has operated to preserve the national forest lands through both the conservation and wise use of the forest resources. In addition to the National Forest System, which is the dominant "arm" of the agency, the Forest Service has two other divisions: Forestry Research and State and Private Forestry. Today, the Forest Service is one of the federal land agencies that provide recreation opportunities and administer National Recreation Areas within its jurisdictions.

Multiple Use and the Role of Recreation

The concept of "multiple-use" of these forest lands has been accepted since the early beginnings of federal land management, yet it was not formally expounded by the Forest Service until the passage of the Multiple Use and Sustained Yield Act of 1960. This legislation set forth a land use management policy recognizing five major uses within the National Forest System: timber, range, wildlife and fish, watershed, and outdoor recreation. The act did not necessarily require that all uses be accommodated in every forest unit, but directed that all uses be accounted for in plans for large areas. It established a coordinated framework for planning and balancing these

various resource uses (and management activities such as fire protection and transportation) and minimizing conflicts among uses (Shands and Healy, 1979, p. 25).

The official role of the Forest Service in managing its lands for a recreation purpose actually began in 1915 when it authorized the lease of forest land to private individuals and associations for the development of summer homes, hotels, stores, and other recreation-oriented facilities (Robinson, 1975, p. 121). As demand for recreation grew during the 1920's and 1930's the Forest Service began to receive minimal appropriations for recreation facilities. It was not until the late 1950's that the Forest Service substantially expanded its recreation program by initiating Operations Outdoors in 1957, a five-year program to provide needed facilities for recreation. In 1959, the National Forest Recreation Survey established a basis for intermediate recreation planning and management. The Multiple Use Sustained Yield Act in 1960 gave statutory recognition to recreation as one of the five managed uses, and in 1965 the Land and Water Conservation Act gave the Forest Service authority to purchase lands specifically for recreation purposes. These programs were in response to the growing national demand for recreation caused by factors such as increased leisure time, mobility, and income of the typical American.

As a result of these actions, outdoor recreation is now a significant element within the overall land management function of the National Forest System. It is perceived as a forest resource to be preserved for the "public good" and available to all individuals. It is also a resource whose use must be carefully balanced with other demands on the forest lands. There are inherent conflicts between recreation use and other resource uses, as well as conflicts between the level or type of recreation development on the federal land and adjacent area.

In the past, the Forest Service has attempted to meet the growing demand for a wide spectrum of recreation activities, ranging in "experience-level" from primitive to modern. It has provided both "dispersed" and "developed" recreation uses; the former is a low-density activity which may use much or all of the forest, such as hunting, fishing, or hiking, while developed uses involve higher concentrations of people and the provision of facilities such as modern campgrounds or ski areas. Recent Forest Service policy has promoted dispersed recreation uses rather than the provision of developed facilities (Shands and Healy, 1979, p. 44). The Deputy Chief of the Forest Service, Edward Schultz, stated in 1972 that "the Forest Service, by virtue of the nature of the land it manages, is a major supplier of those more primitive-type experience-level opportunities," and therefore leaves the more

developed, modern recreation uses to private landowners on the periphery of the forest unit (Schultz, 1972, p. 2). The Forest Service has looked to the private sector to satisfy demand for additional facilities, and to relieve congestion from public facilities within the federal boundaries. This policy in itself has been a stimulus for development on adjacent private lands and inholdings.

Even though present directives seem to discourage developed facilities within forest boundaries, the Forest Service has allowed the private operation of recreation-related businesses since the early days of forest reserves. Today, facilities in national forest such as resorts, marinas, and winter sports facilities are often operated by private interests that lease from the federal government. Schultz (1972, p.3) explained the reasoning behind this policy:

Where fiscal limitations hold back needed government facilities and services, and where profit opportunities exist, private capital can be the means of making the recreation resource available for use, even on the federal land.

Generally, however, private enterprises occur clustered around approaches to federal lands rather than on them.

For the most part, the Forest Service has not competed with private facilities, but has given adjacent communities and private landowners the opportunity to provide needed recreation and commercial services to support the forest recreation environment. This policy is in

accord with the long-held view that the "government should not provide services that the private sector can supply" (Johnson and Tharp, 1963, p. 321). Inherently, though, these policies induce land use conflicts between, for instance, the primitive recreation uses on federal land and the surrounding private, more developed sites. The question of compatibility between various recreation uses is raised, and cannot be ignored by Forest Service policymakers, planners, and land managers.

The Forest Service has traditionally supported a broad policy of regional development of the areas surrounding national forest lands. This has chiefly been directed toward promoting private forest production as a vital part of the local economy and giving assistance to private landowners involved in forestry production. Today, recreation development has entered the scene as a means to economically support and "revitalize" the adjacent rural region.

The same factors creating an increased role for recreation in the national forests have also led to local emphasis on private recreation enterprises as viable sources of community income. The Forest Service has responded to local economic needs by encouraging recreation development as a significant "plus" for the entire region surrounding a national forest. Policies and criteria regarding the establishment of National Recreation Areas

(which are sometimes administered by the Forest Service) especially emphasize regional economic development (Recreation Advisory Council, 1963).

In some sense, the Forest Service multiple-use doctrine has been extended beyond federal land borders to include promotion of timber, recreation, and other resource uses on private lands, not merely for conservation purposes, but for local economic benefit (Blankenship, 1981). In such cases in which the "recreation industry" is a product of the federal land, "there may be conflicts between the primary public purpose and the maximum economic impact on the local area" (Robert Nathan Associates, 1966, p. iv). It is also apparent that increased community income, particularly from recreational land development, does not necessarily suffice to make-up for lost tax revenues from the federal land holdings. (This will be discussed later in this chapter in the section about payments-in-lieu-of-taxes.) The problems of recreational land development in rural areas have already been explained in the previous chapter, and its effectiveness as a "development tool" has been questioned in other literature (Robert Nathan Associates, 1966).

Land Acquisition

Other policies that directly concern adjacent land are those that address land ownership, and more specifically land acquisition policies and procedures. These

policies are probably the most controversial locally, as they alter existing land ownership patterns, disturbing private landowners and changing the local tax base. Land acquisition has traditionally been used by the Forest Service as a tool to combat adjacent land use conflicts, therefore affecting adjacent residents as well (Shands, 1979a, p.45).

The Forest Service was first given the authority within Weeks Law (1911) to acquire forest land for protection of "watersheds of navigable streams" thus "linking the acquisition of forest land to the constitutional authority of the Federal Government to regulate commerce" (Shands and Healy, 1979, p. 15). This legislation spurred the creation of national forests in the Eastern United States which had not previously had land in the public domain as the West had. In 1924, the Clark-McNary Act recognized the production of timber as a legitimate purpose for land acquisition (Robinson, 1975, p.10). Additionally, as mentioned earlier, the Land and Water Conservation Act of 1965 gave the Forest Service authority to purchase lands solely for recreation purposes.

Traditionally, national forest lands have had a fragmented pattern of ownership, particularly in the East where only about one-half of the land within established forest boundaries is owned by the Forest Service (Shands and Healy, 1979, p. 199). Forest policy, although

directed initially toward purchasing all designated forest land, now recognizes the constraints on this consolidated ownership concept, and realizes the benefits of dispersed public and private ownership in many cases (Shands and Healy, 1979, p. 200). Nevertheless, the Forest Service is generally directed to acquire land to protect forest resources, which may mean the acquisition of private inholdings to prevent their development.

In most cases, the Forest Service is interested only in "willing-seller, willing-buyer" arrangements, however sometimes acquisition procedures have involved condemnation of land and subsequent relocation of residents. With condemnation the Forest Service often allows an individual property owner to retain "life-tenure" on the land (Blankenship, 1981).

Because of the federal cost of and local opposition to these land acquisition policies, however, efforts have been made to utilize other methods of preventing adjacent development, such as scenic easements ("less-than-fee" acquisition) and land exchanges. Although the purchase of less-than-fee interests has been successful in some situations, the technique is not used widely. Since the purchase of easements cost nearly as much as fee interests, federal land managers are reluctant about their use (Shands, 1979a, p. 47). Adjacent landowners are likewise reluctant about giving up development rights to their

property. Cooperative exchanges are used to more effectively consolidate federal land and protect federal resources, although they often involve complicated and time-consuming procedures (Shands and Healy, 1979, p. 64).

Because of their direct impact on localities, land acquisition policies are not generally viewed positively by local residents. Local communities chiefly object to the inconvenience and disruption to individual landowners, as well as the loss of the local tax base to federal acquisition. The Federal Government, however, has historically provided some compensation to these communities under the National Forest Revenue Act (NFRA) of 1908 which requires that a portion of the income from forest resources be shared with local governments for support of schools and roads. This "receipt-sharing" policy was supplemented in 1976 with a payments-in-lieu-of-taxes law which affected localities adjacent to all federally-owned land, not just those involved in forest and other resource production.

Payments-in-Lieu-of-Taxes

The 94th Congress passed the Payments-in-Lieu-of-Taxes Act (P.L. 94-565) to help local units of government that were experiencing fiscal problems from the presence of tax-exempt federal lands within their boundaries, and were not receiving adequate compensation from other payment programs such as the NFRA. The act authorizes annual payments to

localities containing federally-owned, tax-exempt "entitlement lands." These payments are based on the greater of either 75 cents per acre, reduced by the amount received in the preceding fiscal year from certain revenue-sharing acts; or 10 cents per acre with no revenue-sharing reductions. The payments are made directly to the local governments and can be used for any government purpose.

It has been argued that even with the implementation of P.L. 94-565 present federal payments do not adequately compensate local jurisdictions for lost tax revenue, and potential cutbacks in payments will be disastrous to these localities (Drummond, 1981). The Advisory Commission on Intergovernmental Relations concluded in its 1978 study on federal compensation that although the payments program was beneficial because of its stabilized nature (not subject to fluctuation in income from forest production), substantial federal land purchases could threaten local communities (Advisory Commission on Intergovernmental Relations, 1978).

The conflict is a difficult one to solve, especially since other factors "muddy" the issue. The Forest Service provides fire protection, law enforcement, and sanitation services, yet does not demand other services such as water and sewer, and schools. Generally, the Forest Service has supported the view that national forests "pay their own way" by bringing recreation opportunities, natural

resource protection, and economic development to the surrounding region (Drummond, 1981, p. 29-30). The costs to local governments induced by federal land ownership such as increased road maintenance and litter control further complicates the picture; it becomes extremely difficult to tell what costs are directly caused by the federal recreation lands and what costs are attributable to the "natural" growth of the community.

Planning and Coordination With Local Governments

The need for a coordinated planning process for our national forest lands and other federal recreation lands has been addressed in Chapter I. Fortunately, Congress has taken some steps to study the issue and pass new legislation that requires coordination between federal agencies and state and local governments.

In 1970, the Public Land and Law Review Commission's report, One Third of the Nation's Land (p. 61) stated, "state and local governments should be given an effective role in federal agency land use planning." The report recognized the need to include the entire "planning area," regardless of ownership, within the federal agency's planning process. It also called for consultation with state and local officials for plan development, circulation of plans for comment, and conformity with state and local zoning "to the maximum extent possible."

At that time, the Forest Service was operating under a functional planning process in which each plan concentrated on an individual resource within the forest unit. These plans were combined to provide one "multiple-use plan," but there was no effort to assess the impact of one forest use on other resource uses (Shands and Healy, 1979, p. 131). There were also no attempts to assess the impact of the forest plans on adjacent landowners and nearby communities, or to effectively coordinate these forest plans with local governments.

By the early 1970's, the nation was engulfed in the environmental movement which resulted in the passage of the National Environmental Policy Act (NEPA) in 1970 and the Coastal Zone Management Act in 1972. Both of these acts represented efforts to provide more effective coordination between levels of government. The NEPA requirement for "environmental impact statements" (EIS) for all federally-owned projects necessitated the involvement of federal land agencies, including the Forest Service, in both an assessment of impacts and a coordinated review process. The newly-developed national forest "unit planning" process incorporated the review of forest plans by other agencies and governmental units and the inclusion of an EIS in each "unit plan." It was not until 1974 and 1976, however, that two Congressional acts were passed that outlined a revised planning process for the Forest

Service which followed the recommendations of the Public Land and Law Review Commission by requiring greater coordination with other levels of government.

The 1974 Forest and Rangeland Renewable Resources Planning Act (RPA) established a long-range process for determining national resource objectives and a management program for these resources. It mandated that national forest planning become part of the national RPA process. The integration of "private-sector capabilities and performance with those of the public lands" was emphasized on the national level, but there was "little direct language in the original RPA Act" that concerned the coordination of plans with local communities (Cooper et al, 1980, p. 189).

The 1976 National Forest Management Act (NFMA) included amendments to RPA which required that land use and resource management plans for forest units be "coordinated with the land and resource management planning process of state and local governments and other federal agencies" (88 Stat. 476, as amended 1976). The Senate intended that this "coordination requirement" be implemented by including state and local governments in the actual planning process, and informing them of alternative courses of action before management decisions are adopted. Sen. Hubert Humphrey, the chief author of the act, stated that the Secretary of Agriculture should consult with state and

local and "give careful consideration to the impact of [national forest] plans on state and local jurisdictions" (Cooper et al, 1980, p. 190).

The Forest Service responded to this mandate by including a section on coordination within both its planning regulations (36CFR, Sec. 219.8) and the Forest Service Manual. The manual addresses "external coordination" (F.S.M. 1920.73) and states that planning should include:

- 1) recognition of the objectives of other federal, state, and local governments, and owners of intermingled lands, as expressed in their policies and plans;
- 2) an assessment of the interrelated impacts of these plans and policies;
- 3) a determination of how each Forest Service plan should deal with the impacts identified; and
- 4) consideration, where conflicts are identified, of alternatives for their resolution.

These requirements refer only to coordination with other government entities. Coordination with private landowners, interest groups, and other organizations is intended to be implemented through the public participation process, unless significant activities on or ownership of private land demand special coordination, such as a large private forest operation adjacent to the federal land (Cooper et al, 1980, p. 191).

Both the RPA regulations and the Forest Service Manual provide specific requirements to insure coordination during the preparation, revision, or amendment to regional

or forest land and resource management plans. These include: 1) giving of notice, 2) interaction with state governments, 3) coordination with owners of intermingled lands, 4) meetings with states, federal agencies, and Indian tribal governments, 5) appraisal of relevant land and resource management plans of other government agencies, 6) special coordination of research activities, and 7) continual monitoring and evaluation of the cross-impacts of national forest management on adjacent or nearby lands and communities, and the neighbor's impact on the national forests (Cooper et al, 1980, p. 192). These requirements "envision a continuing process of information sharing" initiated by the Forest Service, and resulting in forest plans that

reflect information available from other government units, are aware of the plans of other government units, and consider the mutual impacts of these plans on resources managed by the Forest Service (Cooper et al, 1980, p. 197).

Conclusion

This recent legislation and subsequent planning guidelines have initiated a new strategy toward increased coordination between the Forest Service and state and local governments, yet there are many questions to be answered and details to be "fine-tuned" regarding a coordinated planning process. Often the federal agency finds difficulties in relating its planning process to local government planning (Culhane and Friesma, 1979, p. 71).

Another problem is that there is often an absence of local planning to coordinate with, especially in rural areas. This leads to the question of who should the Forest Service coordinate with and how should this coordination be implemented? The established coordination requirements only vaguely address how local governments should be involved in the actual planning process and how plans should be coordinated with local plans and policies.

Policies adhered to by the Forest Service and other agencies have created situations in which federal recreation units (especially those designated as "national recreation areas") have been promoted as catalysts for regional development in a rural area. With the new legislation, the Forest Service must now recognize adverse impacts on the surrounding region and should more actively coordinate its plans and management decisions with local governments. Even when little planning capacity exists in local communities, the Forest Service should provide a role for local governments by including coordinated functions within its planning process.

The following case study investigates the role of the Forest Service in attempting to coordinate its plans for this particular recreation unit with local jurisdictions, and evaluates its effort to consider lands adjacent to that recreation unit in its planning process.

CHAPTER IV

HISTORICAL BACKGROUND AND DESCRIPTION OF MOUNT ROGERS NATIONAL RECREATION AREA

During the late 1970's, controversy arose in several rural southwestern Virginia counties over a new 10-year management plan for the Mount Rogers National Recreation Area. Much of this interest came from neighboring communities and adjacent landowners who were concerned about the impact of the plan (whether viewed as positive or negative) on their land and their lifestyle. The issues of adjacent land development, as discussed in Chapter II, were very much in the forefront in this particular situation. The Forest Service, as the administering agency for the recreation area, was guided by federal policies concerning adjacent land, and its planning process involved consideration of adjacent communities. Because of its relevancy to the research topic, this particular case study was chosen. This chapter and the analysis in the following chapter are intended to provide an objective discussion of the planning and coordination involved in dealing with these controversial land use issues.

Congressional Authorization

On May 31, 1966, a legislative act established the Mount Rogers National Recreation Area as a part of the existing Jefferson National Forest in southwestern

Virginia. The Mount Rogers Act (P.L. 89-438) specifically provided for the

public outdoor recreation use and enjoyment of the area in the vicinity of Mount Rogers...and to the extent feasible the conservation of scenic, scientific, historic, and other values of the area.

The Secretary of Agriculture is given the authority to purchase "by gift, exchange, condemnation, transfer from any federal agency, or otherwise" lands, waters, or other interests (including easements) within the boundaries of the recreation area "as he determines to be needed or desirable for the purposes of this act" (Sec. 3). The responsibility for development and administration of the National Recreation Area (NRA) is placed with the Secretary of Agriculture "in accordance with the laws, rules, and regulations applicable to national forests" (Sec. 5).

The Mount Rogers project was selected through the application of both primary and secondary criteria for National Recreation Areas established by the federal Recreation Advisory Council in 1963. This criteria along with the legislative authorization served as future directives for planning and development of the Mount Rogers National Recreation Area (Blankenship, 1981).

Land Area and Location

The area designated as the Mount Rogers National Recreation Area is composed of 154,000 acres--84,000 of which were already in federal ownership within the Jefferson

National Forest prior to the authorization of a national rescreation area. Since that time, 25,000 additional acres have been purchased for the NRA under fee-simple agreements. The total federal ownership of land (109,000 acres) is not consolidated but intermingled with private land ownership within the Congressionally-established boundaries of the NRA.

The Mount Rogers National Recreation Area is located within a five-county area in southwestern Virginia composed of Carroll, Grayson, Smyth, Wythe, and Washington Counties. (See Figure 1.) The area extends from the town of Damascus on the west (near the Tennessee-North Carolina line) to the New River located to the northeast. Characterized by mountainous terrain and elevations ranging from 2000 to 5000 feet, this region is located within both the Appalachian Ridge and Valley and the Blue Ridge physiographic provinces. It contains the Iron Mountain range and three prominent peaks: Pine Mountain, Whitetop Mountain, and Mount Rogers, the highest point in Virginia at an elevation of 5729 feet.

Present Scale of Development

Today, the Mount Rogers National Recreation Area provide camping facilities, hiking trails, and information services and facilities to the visitor. Visitor activities available include hiking, camping, picnicking, swimming, fishing, hunting, horseback riding, and bicycling.

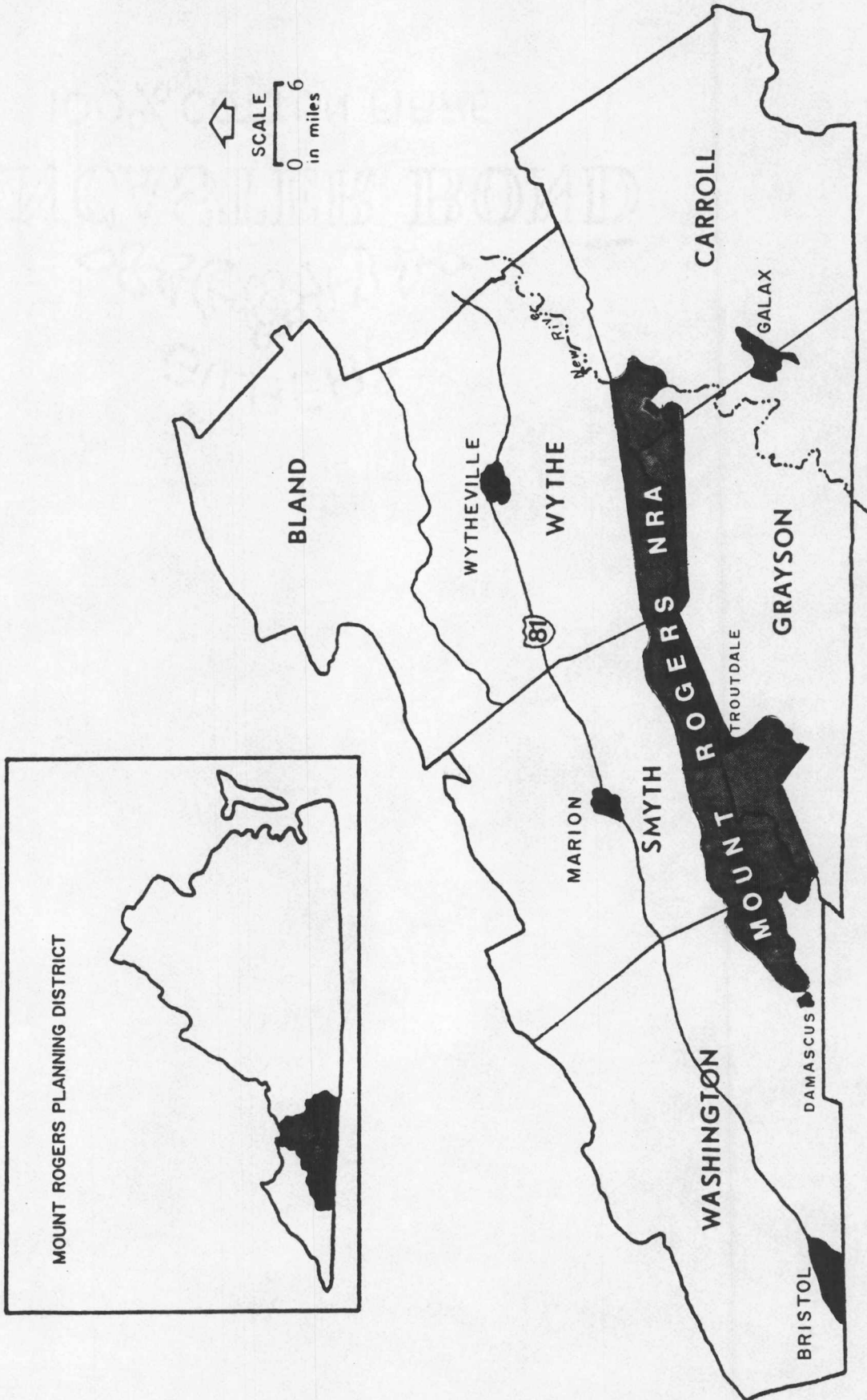


Figure 1. Map of the Study Area: Mount Rogers National Recreation Area and Surrounding Jurisdictions

Since the neighboring communities lack necessary overnight accommodations, campgrounds have been a top development priority for the recreation area (USDA, 1980, p. 7).

The five campgrounds located in the NRA provide various levels of opportunities ranging from primitive to more "comfortable" camping. Developed recreation facilities also include three picnic areas, two observation sites, two amphitheaters, and a nature trail. Dispersed recreation facilities include 115 miles of hiking trails, 72 miles of horse trails, 78 miles of all-purpose trails, 48 miles of roads and trails open to off-road vehicles, 7 trail shelters, 2 lakes for fishing, and 75 trout streams.

Administration

The Mount Rogers National Recreation Area is administered by the U.S. Forest Service through the Forest Supervisor's office for the Jefferson National Forest in Roanoke, Virginia. The Mount Rogers Ranger District headquartered outside Marion, Virginia is responsible for direct management of the NRA.

Adjacent Area

The five-county area in which the NRA is located contains several incorporated cities and towns including Troutdale, Marion, Damascus, Galax, and Wytheville. The town of Troutdale and other small unincorporated communities are actually situated on inholdings of private land

within the federal land boundaries. Lying also as close neighbors to the federal unit are two state parks, Grayson Highlands State Park in Grayson County and Hungry Mother State Park near Marion.

The adjacent area is for the most part a distinctly rural region characterized by open farmland used for crop production and animal grazing. Industrial development has occurred in the surrounding region, but at some distance from the NRA. This development has chiefly been the growth of light industries located along the Interstate 81 corridor and other major highways. Small rural communities and incorporated towns in and near the NRA support commercial businesses serving nearby residents (USDA, 1980, p. 4).

Very limited tourist-related activity has developed in these adjacent communities as a result of the establishment of the NRA. This has been chiefly due to the low scale of development within the recreation area to date and the national economic trends toward high interest rates and inflation which have discouraged private investment (Wallace, 1981). The presence of the NRA, however, has been important to surrounding communities since its inception, and especially to those towns within the boundaries of or relatively close to the federal land. Undoubtedly, these communities are affected in various ways by activities within the National Recreation Area, and have

ultimately been influenced by Forest Service planning for the area.

Early Plan Development

After passage of the Mount Rogers Act in 1966, the Forest Service began implementation of the act with the initial development of a short-range plan for the area. In 1968, the Mount Rogers National Recreation Area Plan was approved, establishing management direction, a landscape theme, and a five-year action program for the recreation area. Guided by the Forest Service multiple-use planning process, the plan identified several "zones" within the federal unit including the crest zone, backwoods zone, and waterfront zone. In addition to this "management guide," the Forest Service recognized the need to acquire land to fulfill the recreation goals of the act and therefore developed a land acquisition plan.

During this early period, there existed much local support for the NRA, chiefly because of the perceived economic benefits that would be derived from its development. The surrounding area was at the time experiencing a declining economy and outmigration of youth. The coming of the NRA was seen as an "economic saviour" to the region and was promoted as such by the Forest Service and local officials (Taylor, 1981).

Local citizens were initially concerned about both positive and negative consequences of new development

that would be stimulated by the federal project. In 1967, a group of residents met with state and federal officials to express this concern and eventually formed the Mount Rogers Citizens' Development Corporation (CDC). Through this local activity, impetus was born for the establishment of a regional planning organization representing the local governments surrounding the NRA. This early planning commission later evolved into the present Mount Rogers Planning District Commission, a regional agency authorized under state legislation and headquartered in Marion, Virginia. (This planning district was composed of the five counties mentioned earlier and one additional county--Bland County.)

The Mount Rogers Planning District Commission (PDC) initiated several early studies related to the development of the NRA. In April 1969, it commissioned two separate studies to be done by outside consultants. One of these was a general economic base analysis of the region, while the other one was concerned with the recreation impact and potential for the region. This second study, done by Gardner Gidley and Associates of Winston-Salem, researched the recreation demand on adjacent private lands.

In 1970, the PDC contracted with this same recreation planning firm (now called Recreation Planning Associates) for a study of land use controls for surrounding counties. This project involved numerous workshops with local

officials and general data collection activities. It culminated in the publication of a lengthy document entitled Mount Rogers Impact Area Comprehensive Plan and Land-Use Controls 1975-1980. Proposed in this report was the concept of a "highland recreation zone" to be used for areas within and adjacent to the NRA.

These early studies were not prompted solely by the establishment of the National Recreation Area. They also anticipated the future creation of the Blue Ridge Impoundments, two large lakes on the New River proposed by the Appalachian Power Company. (This project later succumbed under pressure from strong opposition.) The plan and proposed land use controls for the Mount Rogers area, therefore were designed to respond to recreation-oriented growth created by both the Blue Ridge Impoundments and the NRA. The proposed land use controls were prepared primarily for Grayson County which was expected to experience the most combined impact from both of these developments (Recreation Planning Associates, 1971).

Coordinated through the PDC, these early planning studies concerning adjacent lands did not directly involve Forest Service personnel. However, by 1972 the Forest Service had initiated "unit planning" which incorporated new elements into the planning process for the NRA. This new process broadened Forest Service planning to include

formal consideration of impacts on adjacent lands and coordination with nearby local governments.

Concurrent with this change in Forest Service planning, the PDC began to be more involved in other activities on the regional level and shifted its emphasis away from solely planning for the NRA (Blankenship, 1981). Along with these policy changes, the area itself was beginning to undergo significant changes. Following the national trend away from large metropolitan areas and responding to transportation improvements to the area, new residents were migrating into the smaller communities in the Mount Rogers region. These separate factors served to significantly influence future Forest Service planning for the NRA.

Unit Planning

The unit planning process instituted by the Forest Service incorporated the broad concepts of the National Environmental Policy Act (NEPA) passed in 1970: the use of interdisciplinary teams, public involvement, and intergovernmental review. Unit planning differed from the old multiple-use planning in its definition of the planning unit; planning was based on ecologically-defined "units" rather than administrative divisions. In addition, each unit plan was intended to be accompanied by an EIS, "signifying that the unit plan was a 'major federal action'"

(Culhane and Friesma, 1979, p. 53). As these changes in Forest Service policy and guidelines filtered down from Washington, they were incorporated in the planning process for Mount Rogers National Recreation Area (Blankenship, 1981).

In 1972, the Forest Service formed a five-person interdisciplinary team and assigned one member as a liaison officer to the PDC. They held initial "listening sessions" to solicit public input for a ten-year plan for the entire NRA. However, it was not until February 1978 that the Draft Environmental Statement for the NRA which resulted from this process was submitted for public review and comment. (It was dated September 1977.) This document, referred to as the draft "unit plan," essentially "translated the legislative history of the NRA into a physical lay-out on the ground" (Blankenship, 1981). It projected five million visitors annually by the year 2000 and proposed a 63-mile scenic highway and eight major recreation complexes, including a developed winter ski area.

When public review sessions were held for the plan during the next few months, the Forest Service received much negative feedback concerning the scope of development, the scenic highway, water impoundments, and various other issues. During the eight to ten year period since the early planning activities, a change in public attitudes had occurred. By the time the draft plan was completed,

many local residents--often new residents--felt that intensive recreation development would not be the best alternative for the region and they opposed the development plan proposed for the NRA. However, there remained a large group of staunch supporters who favored the plan, causing a very polarized situation at the local level (Blankenship, 1981).

In addition to the general public opposition, the Forest Service was also confronted by the planning district commission and some local government officials. Staff planners at the regional agency questioned both the visitation projections made and the assessment of impacts done by the Forest Service. They felt that not enough attention had been given to the impacts of the plan on local governments in the adjacent area. The planning district commission, by then involved in numerous other regional projects and duties, felt it was the Forest Service's responsibility to assess these consequences adequately and consider the mitigation of any adverse impacts that would be caused by the NRA (Wallace, 1981).

As a result of this negative response, the Forest Service was forced to re-evaluate its draft plan. The end-product was a final plan that deleted several elements of the draft plan, particularly the scenic highway and ski area. Visitor estimates were cutback from five million to two to three million visitors annually by 2000. This

final plan, approved in March 1980, was entitled the Final Management Plan and Environmental Impact Statement for the Mount Rogers National Recreation Area. The environmental impact portion of the plan presented seven development alternatives ranging from "Management as a Preservation Area" to "Maximum National Development," evaluated each one, and recommended the preferred alternative.

During the review period between the draft and final plan, new legislation from Congress mandated yet another change in guidelines for Forest Service planning; the National Forest Management Act was passed in 1978. However, because pursuant regulations were not issued until September 1979, the final management plan does not meet all the provisions of the new legislation (USDA, 1980, p. ix). Current planning activities are now guided by the new "land management planning" principles within this particular legislation.

Current Planning

Through the guidelines provided by the National Forest Management Act (NFMA), a "tiering" of planning has been developed by the Forest Service (Blankenship, 1981). Currently, the Forest Service is implementing the ten-year management plan through the development of more specific site plans for each proposed development site in the recreation area. A process is undertaken involving an environmental assessment for each site. Ultimately,

however, the implementation of the management plan is dependant on annual appropriations from Congress.

The NFMA also calls for a shift from unit planning to forest-wide planning and land management. As a result, future planning efforts for the National Recreation Area will be incorporated into the planning done for the entire Jefferson National Forest--of which it is a part. At this time, it is uncertain how this will affect the overall ability to plan effectively for the NRA itself (Blankenship, 1981).

A third mandate of the National Forest Management Act is the coordination of plans with state and local plans. The regulations regarding this new directive are included in the Forest Service Manual and are outlined in the previous chapter. (See p. 41.) Although these specific stipulations of the act were not available until the very latter stages of the unit plan development and the publication of the final management plan, they do apply to current and future planning activities for the Mount Rogers National Recreation Area.

Prior to this Congressional legislation mandating coordination, the Forest Service had attempted coordinated planning with local communities outside the NRA. The next chapter examines the extent of those efforts and the problems associated with interaction between the Forest Service and local officials throughout the planning process for the NRA.

CHAPTER V

ANALYSIS OF THE FOREST SERVICE PLANNING PROCESS AND ITS COORDINATION WITH COMMUNITIES ADJACENT TO THE NRA

Introduction

During the fifteen year involvement with the Mount Rogers National Recreation Area, the Forest Service has been directed to follow an assortment of planning procedures and requirements. It has proceeded from multiple-use planning, to unit planning, and finally to land management planning. The published products of its planning efforts have included an early short-range plan (1968), a draft unit plan (1977), and a final management plan and environmental impact statement (1980) designed to guide the development of the NRA for the next decade. At this time, the Jefferson National Forest is involved in a forest-wide land management planning program which will include the National Recreation Area.

Given this lengthy and dynamic history of planning for the NRA, it becomes difficult to provide a concise analysis of the Forest Service overall planning effort. Nevertheless, this research has attempted to examine the Forest Service effort as a continuous planning process. In this chapter, the process is analyzed with respect to the traditional planning steps or functions: problem identification and analysis, goal formulation, evaluation of

alternatives and alternative selection, implementation, and continual evaluation of the plan.

These six broad planning stages are generally accepted in planning theory and represent a rational thought process for decision-making. For that reason, they are used in this research as a basis for evaluation and for general organizational clarity. Although these steps are presented sequentially, they often occur simultaneously and in this case have occurred interchangeably throughout the fifteen year period and the three chronological stages of planning for the NRA.

The evaluation on the following pages, however, is not a comprehensive assessment of these particular planning steps. Rather, the analysis focuses on Forest Service coordination with adjacent communities and their local governments within these planning phases. A major assumption of this study is that a coordinated planning effort for areas adjacent to federal recreation areas should be initiated by the federal land agency involved; in this case, it would be the Forest Service. In developing a large recreation complex, the Forest Service becomes responsible for considering adjacent communities throughout its planning process, particularly in a situation in which local and regional planning capacity may be limited.

Criteria for this evaluation consists of a general set of activities or elements that are needed for

"successful" coordinated planning between federal land agencies and their neighbors. These activities fall within the various steps of the planning process. (See Figure 2.) The general criteria used in this analysis reflect some of the requirements mandated by Congress for Forest Service planning and coordination. However, this evaluation is not based directly on the ability of the Forest Service to meet those requirements in the Mount Rogers case, since much of the planning effort for the NRA occurred prior to these regulations.

The outcomes of coordination perceived by interview sources in this case study also serve as a "measuring stick" for this evaluation. Individual attitudes and opinions have been referenced, although several ideas within this chapter have been derived from a synthesis of sources and are not specifically cited. Inevitably, different perspectives have evolved among the actors in the process. Nevertheless, this research attempts to provide an objective analysis of Forest Service coordination and planning for the Mount Rogers NRA. Essentially, it focuses on the attention given to adjacent lands in the planning process and the coordination of that process with local governments.

Problem Identification and Analysis

This initial step is of crucial importance in any planning effort. A clear understanding of the key issues and problems involved will better guide the process toward

PROBLEM IDENTIFICATION AND ANALYSIS

- Recognition of adjacent land use issues

CONTINUAL EVALUATION

- Monitoring of adjacent impacts
- Re-examination of adjacent land use issues

IMPLEMENTATION

- Interaction between federal agency and local officials

GOAL FORMULATION

- Consideration of local goals and objectives
- Negotiation and compromise

DATA COLLECTION

- Inclusion of adjacent area data
- Information exchange between federal agency and localities

EVALUATION OF ALTERNATIVES /
PLAN SELECTION

- Consideration of "adjacent area impact" in terms of social, environmental, and economic costs
- Proposal of mitigative measures in selected plan

Figure 2. Framework Used for Analysis of Forest Service Planning Process

solving those problems. Although a detailed problem analysis may not be possible until after the collection of more information later, there is general agreement in planning literature that some analysis of the existing situation and a determination of issues and problems need to be undertaken at the outset of the process before goals and objectives can be formulated.

In a coordinated planning effort for federal recreation area, the federal agency is responsible for recognizing adjacent land use issues and problems associated with private lands and local communities. Federal land agency concerns cannot be isolated to the immediate planning area, but must extend to outside communities that may be affected by the recreation area or may subsequently affect federal resources. Direct and indirect interrelationships between the federal land and private lands need to be realized at the outset of the planning effort (and re-examined throughout the development of the federal unit). Through this analysis adjacent land use issues can be approached logically and significant problems identified. These problems and concerns can then be translated into goals and objectives--the necessary elements for evaluation of alternatives and the continual evaluation of the plan.

In the early plan development for the Mount Rogers National Recreation Area, the adjacent land use issue was generally perceived as an opportunity rather than a problem

(Argow, 1981). The Forest Service and local officials promoted the benefits of regional growth and development that would accompany the NRA. The short-range plan published in 1968 emphasized the opportunities available for private recreation development on adjacent lands and inholdings that would be stimulated by the NRA (USDA, 1968).

At the same time, the Forest Service was concerned about the potential threat of the "wrong kind" of development and its impact on federal land resources. Desiring to maintain the rural landscape of the area, Forest Service officials recognized that incompatible land development on nearby private lands could detract from the preservation theme of the NRA (Melancon, 1981). Because of this concern for the "backlash" effect of adjacent development, the Forest Service was eager to involve local communities in planning and land use control.

Since they had no legal means to control land use beyond their borders, the Forest Service generally viewed adjacent development as a local problem and a local responsibility only. The Forest Service supported local zoning as a vehicle for solving adjacent land use conflicts. However, the rural localities surrounding the NRA were not especially receptive to the idea of zoning. Therefore, the effort to get local governments to pass zoning regulations became a major struggle for the Forest Service (Brock, 1981). Essentially, achieving what was viewed as a solution became a problem in itself.

As the Forest Service spent time and resources on promoting local zoning, not enough attention was given to analyzing the actual problem--the land use interrelationships and impacts between federal lands and adjacent communities that could occur in this particular case. Although they were internally concerned about the impact that adjacent development would have on their resources, the Forest Service did not address the adverse consequences associated with the NRA that might directly affect the local communities themselves.

The federal perspective on the issue was essentially one-sided; adjacent development was viewed as more of a potential threat from outside forces than as a direct impact on private lands caused by the NRA and a threat to adjacent small communities (Wallace, 1981). Of course, the general feeling of most of the local residents during the early plan development supported the positive impact and benefits of the NRA. This put the Forest Service on comfortable ground since they were not confronted with much early opposition to their plan from local people (Blankenship, 1981).

It was not until the second stage of planning began (unit planning) that the Forest Service perspective toward adjacent land use issues was forced to expand to include some consideration of actual impacts on local communities. This pressure came from both federal

legislation and growing public criticism. With the passage of the National Environmental Policy Act (NEPA) and its integration into the Forest Service planning procedure, the impacts of any new development had to be formally considered. In addition, many local residents began to organize and call for more federal attention toward impacts from and interrelationships between the proposed recreation development and their communities.

The draft environmental statement and unit plan for the NRA (DEIS) published in 1977 discussed environmental impacts of the proposed plan. Because consideration of the "adjacent area impact" is considered a part of the alternatives evaluation stage of the planning process, these assessments are discussed at more length later in this chapter. However, the point to be made is that even though the Forest Service may have been forced to meet federal regulations and to respond to public criticism, it did essentially recognize adjacent impacts as "problems" during the unit planning process for the NRA.

The DEIS described the environmental effects on soil, water, air, vegetation, animal life and the "human environment" which included social/cultural and economic impacts. Adverse environmental impacts on adjacent lands were especially recognized with regard to soil and water conditions. Soil disturbance and compaction, as well as stream sedimentation, were discussed as potential results

of "project-generated utility lines, private development on adjacent lands, and other construction activities...." (USDA, 1977, p. 6).

The DEIS described the social and economic effects that would adversely influence the human environment of the adjacent area (USDA, 1977, p. 14). It recognized major impacts that would be experienced by adjacent communities.

Demand for public service will increase, straining or exceeding the localities' (communities or counties) present capabilities. Motor vehicle traffic will increase with a resultant increase in noise and pollution. Greater numbers of people with different lifestyles will move into the area. Usage of private land in and adjacent to the area will change in response to demand (USDA, 1977, p. 19).

Even though it recognized many of these adverse impacts, the Forest Service's concern continued to be chiefly an internal one for its own resources. The unit plan noted that uncontrolled development could result in "serious erosion of the basic scenic and environmental resources that give the NRA the potential to supply quality recreation experiences" (USDA, 1977, p. 77). While assuming that local zoning would be the tool to prevent adverse land development near the NRA, the Forest Service did not fully recognize the potential impact of the NRA directly on adjacent lands and local communities.

The Forest Service recognized that "any major recreation development would cause changes in nearby adjacent

lands" (Blankenship, 1981). However, it continued to feel that adjacent development problems were not its responsibility, but were the responsibility of state and local governments and the private sector (USDA, 1977, p. 56). It was not until the reaction to the draft plan surfaced that the impact of the scope of development proposed for NRA became a pertinent issue recognized by the Forest Service. The crucial criticism is that potential adverse impacts and other adjacent land use problems were not recognized and analyzed early in the process. Subsequently, this prevented the formulation of goals and objectives that should have directly addressed these problems.

Goal Formulation

This phase of the planning process essentially provides a directional guide for the remainder of the planning activities. Goals and more specific objectives need to be developed that respond to identified problems or issues, and provide a future condition to reach for. Later, they are used as a basis for evaluating the actual outcomes of a planning program.

If a planning effort for a large federal recreation area is to be coordinated with adjacent communities, goals need to address external issues and problems as well as more internal concerns. According to the new Forest Service regulations, actual goals and objectives of local communities should be taken into account in planning for

federal recreation lands (Forest Service Manual 1920.73). This goal-formulating step then requires local participation to determine these local goals and objectives. Compromises and negotiation are necessary to resolve the inherent conflicts between local and national goals.

Goals for the Mount Rogers National Recreation Area were actually drawn from the legislative history of the NRA (which includes the Mount Rogers Act and legislative records that serve as the basis of the Act) and the criteria for National Recreation Areas set by the Recreation Advisory Council (R.A.C.) in 1963 (Blankenship, 1981). Primarily these consisted of specific recreation objectives or criteria, such as numbers of expected visitors and the types of facilities to be provided. No goals were formally adopted that actually applied to adjacent land use issues; goals were chiefly internal objectives and not related to any "outside" problems regarding local communities. However, the Forest Service perceived that it was addressing local goals by providing recreation facilities desired by many local residents such as water impoundments and by generally promoting economic development of the surrounding region (in accordance with the R.A.C criteria) (Blankenship, 1981).

In the unit planning period, the Forest Service followed the original goals and concepts drawn from the legislative history of the NRA, and "from the other laws and

directives applying to the administration of all National Forest lands" (USDA, 1980, p. 50). The draft unit plan listed fourteen planning objectives derived from this legislative history (USDA, 1977, p. 50). Although these objectives applied mostly to the utilization of resources within the boundaries of the NRA, two of the objectives provided some mention of local governments and adjacent private lands. The Forest Service stated that it would "work in an advisory and facilitory role with local government and local people to achieve orderly, compatible development of adjacent private lands" and that its plan would be "consistent with local government plans and programs wherever it enhances the purpose of the Mount Rogers Act" (USDA, 1977, p. 55). These objectives were actually general policy statements rather than specific goals that could be used to guide the evaluation and selection of plan alternatives.

In the final plan, the list of goals was condensed into eight statements--none of which mentioned private lands or local governments (USDA, 1980, p. 50):

- 1) To provide for outdoor recreation use and enjoyment of the Area as the primary resource management objective
- 2) To conserve scenic, scientific, historic, and other features of the Area which contribute to public enjoyment
- 3) To facilitate the Area's high capacity for fulfilling the outdoor recreation needs of the nation

- 4) To increase the permanent economic base of the area by providing for management, utilization, and disposal of other resources wherever these activities promote or are compatible with the recreation objective
- 5) To provide a public land base for a full spectrum of outdoor recreation activities, including hunting and fishing
- 6) To develop facilities which afford all recreationists opportunities to appreciate the topography and geographical location of the lands
- 7) To provide facilities for summer and winter outdoor recreation
- 8) To give special emphasis to nationally designated areas, such as the Appalachian Trail and proposed wilderness areas

In contrast to the draft unit plan, these goals did serve as a basis for evaluation of the plan alternatives; each alternative was weighed as to its "potential for fulfilling objectives of legislative direction" (USDA, 1980, p. 57). However, because no adjacent land use goals or concerns were expressed in this list, no real measures were provided for weighing alternatives in terms of their adjacent impacts. (See p. 79 for more discussion about the evaluation of alternatives.)

Stemming from the lack of early identification and analysis of land use interrelationships between the NRA and its neighbors, the formulation of goals that address these issues was neglected as well. The Forest Service, although no doubt concerned about adjacent land problems, generally felt it was not within their jurisdiction to be

able to deal with such problems. Therefore, these adjacent or private land use issues were not addressed "head-on" by studying the problem and setting goals to emphasize the interrelationships and positive benefits and to mitigate or prevent adverse impacts. This initial neglect of these important issues affected the remainder of the planning process for the NRA.

Data Collection

After problems are identified and goals formulated, data collection is initiated to provide accurate information for making projections and plans. Information is needed to inventory present conditions, analyze trends and changing patterns, and project future needs and demands. This planning step generally demands particular time, staff, and monetary resources and many planning efforts are hampered by the lack of such resources.

In a coordinated planning effort for adjacent communities that requires coordination between levels of government, one of the key problems is the differences in data bases between the federal land agency and the local government. A federal agency may collect substantial information about land within its ownership, while the data-gathering of a local or regional planning body tends to stop at the federal boundaries. Therefore, the result is that no one unit of government gets a whole picture of the federal unit and its surrounding region in terms of

necessary base information. Due to the interdependence between federal lands and their neighbors, pertinent data must be collected through a more comprehensive framework.

Generally, a coordinated planning effort requires arrangements and agreements regarding the data to be collected and the "collecting body" assigned to undertake the task. The federal agency should be responsible for including the entire adjacent area in its planning process, thereby necessitating a large amount of data collection on its part. However, regional and local planning bodies are often valuable sources of needed information and should be actively incorporated into the data collection stage. During this step in planning, it is crucial that available information is readily exchanged between federal personnel and local officials. This exchange of information requires open communication and cooperation between the units of government and should be based on a mutual understanding about the use of the data within the overall planning process.

In the Mount Rogers case, the difference in data bases was a definite problem experienced in the Forest Service's planning effort. Since it was initially guided by internal objectives, the Forest Service was logically geared toward collecting internal data pursuant to meeting those objectives. Additionally, as a federal land agency, the Forest Service is required to collect specific information on the

forest level that relates little to adjoining private lands (Blankenship, 1981). The commitment of resources to this internal data collection in the early stages of planning often precluded or at least overshadowed efforts to obtain necessary information about adjacent lands. Forest Service personnel perceived that most data needed regarding private land would be available from the Mount Rogers Planning District Commission (PDC) in Marion, Virginia (Blankenship, 1981).

Serving as a regional planning body and clearinghouse, the PDC is a valuable resource for information. However, its data base encompasses an entire six-county regional district and includes areas relatively remote from the NRA. Recognizing this problem, the Forest Service excludes data from Bland County which lies to the northwest and does not include any NRA land (Blankenship, 1981). Even so, the Forest Service is still left with information on a level that is often only marginally useful in relating to specific adjacent communities such as Troutdale or Konno-rock.

Planning information on the county or town level is not abundant due to the lack of local planning staffs. The PDC has assisted each county in preparing a comprehensive plan. However, county plans that were done or were in preparation stages while the unit plan was being developed "tended to deal with the NRA as a separate entity,"

thereby providing a data base that excluded information on federal lands (Blankenship, 1981).

As a result of this incongruity of data bases, a less-than-comprehensive approach has been taken in planning for the adjacent area outside the NRA. For the most part, the PDC and the Forest Service have been separately involved in data collection regarding adjacent lands rather than jointly. Much of the early collection of information on private lands was done by the consultants contracted by the PDC. These consultants worked chiefly with the local boards of supervisors and the PDC. Early data collection was not coordinated as a partnership between the Forest Service and the PDC, although they did work jointly in an effort to study housing within the boundaries; in this case, the PDC collected information for the Forest Service (Blankenship, 1981). Because they had become outdated by then, the early planning studies were used little in the unit planning process and the development of the final management plan.

In the unit planning process, the Forest Service became more involved (through contract agreements) in collecting data about the local area. This information was needed to complete (and later update) the economic and social impact assessments as well as the transportation study. The economic and social assessments done by the outside consultants for the Forest Service recognized the

five-county region as the "impact area," however, there was never any delineation by the Forest Service of a more specific adjacent area that would be affected by the NRA. Understandably, this would have been an extensive undertaking, but would have been useful in assessing impacts and planning for adjacent communities. However, neither the Forest Service nor the PDC had the resources to commit to more comprehensive data collection and no attempts were made to overcome this data base problem.

Regardless of their "separateness," the Forest Service did heavily rely on the PDC for some of its planning data. Although general in nature, information in county plans was reviewed by the Forest Service (Blankenship, 1981). With the scarcity of local planning data, the PDC was viewed as the logical source of this needed information. This reliance emphasized the need for a permanent data-sharing function, as the PDC also required information that the Forest Service had available.

The Forest Service had initially set up a liaison position to facilitate the day-to-day exchange of information. This individual worked out of the planning district office in Marion and was chiefly responsible for transmitting local information back to the Forest Service, such as data on land tracts or the local transportation network. This position was a "pilot effort" for the Forest Service, yet its success was "lukewarm" (Blankenship, 1981).

Communication problems existed and the desired flow of information did not take place, so the position was later terminated.

Therefore, during much of the unit planning and final management plan "era," there was no officially-designated liaison officer. Information was exchanged through a team concept in which a PDC staff person met with the Forest Service planning group (Brock, 1981). In 1980, the Forest Service re-established a liaison position hoping to provide increased external coordination with local governments and other outside interests. (This continual coordination effort will be discussed later in this chapter.)

In collecting information through the regional agency, the Forest Service made the mistake of overlooking the individual local governments of the counties and incorporated towns. Even though the PDC represents these governments and provides a centralized data base, it plays only an advisory role and can implement its plans and policies only through the local bodies. (Fifty percent of the planning district commissioners are local elected officials.) Local planning commissioners recommend actions to the county boards of supervisors who ultimately make the local decisions. Forest Service officials tended to work more with the regional planning staff than with local officials (Melancon, 1981).

The result was a feeling of resentment by some local officials. Several of those officials interviewed felt that they had been left out of the NRA planning process and the proper information did not always reach them. Of course, this problem is not merely related to data-sharing, but has ramifications for the rest of the planning process, especially the implementation stage. (See p. 84.) In its data collection activities, the Forest Service neglected local officials who are valuable sources of information in terms of their knowledge of the area and its people. Their governments lack the resources to research and statistically record pertinent data, but the officials themselves can often provide necessary information not available from the regional planning agency.

Along the same line, local governments and their representatives need information available from the Forest Service in order to plan and coordinate their actions. However, even with a liaison position established, this information exchange did not adequately occur. The PDC and local governments were not readily given information by the Forest Service during the long preparation of the unit plan (Wallace, 1981). Many local officials were unaware of the contents of the unit plan until after it was finally issued in 1977.

One problem was that local officials often did not have time or desire to review the technical use of data

by the Forest Service (Perry, 1981). However, they should have been exposed to the data collection activities and more aware of how the data was used in making plans and projections. Early communication of information in both directions might have improved the planning process and prevented subsequent problems.

Evaluation of Alternatives and Plan Selection

The next step in a rational planning process following data collection is the formulation of alternatives and the evaluation of those alternatives. The end-product is a selected alternative or "plan of action" that attempts to meet the goals and objectives of the planning process. The selection of the preferred alternative should also be based on an assessment of the benefits versus the costs of implementing that action. By systematically evaluating possible courses of action, better decisions are more likely to result.

The evaluation of alternatives is especially crucial in a coordinated planning effort for communities adjacent to federal recreation areas. Most importantly, the assessment of benefits versus costs of each alternative development plan should be applied to the adjacent area and local governments that may be directly affected. Ideally, the "adjacent impact assessment" should be an integral part of the federal agency's planning process and should involve interaction between the federal agency and local

governments. The final plan should not only recommend the "best" alternative for development in terms of benefits and costs, but should also prescribe any mitigative measures to deal with adverse impacts on adjacent lands.

Although guided by specific objectives or criteria in the early plan development for the NRA, the Forest Service did not initially propose more than one choice or alternative for meeting those criteria. Instead, it espoused one design concept or idea (formulated from the legislative history) and developed an area recreation plan (part of the short-range plan) based on this concept. This plan specified that any decisions regarding visitor use and facilities would be based largely on "intuitive judgement," since the NRA was viewed as an unprecedented type of development by the Forest Service (USDA, 1968, p. 7). This "intuitive judgement" process by the Forest Service personnel neglected to evaluate public land use decisions in terms of their positive or negative impacts on private land use and on adjacent local governments.

Again, it was not until the National Environmental Policy Act (NEPA) was passed in 1970 that the Forest Service integrated formalized alternatives evaluation into its planning process and was forced to provide information for evaluating various alternatives through an impact assessment procedure. It was this step in the process of planning for the NRA that created significant criticism

from regional planners, local officials, and concerned residents.

In their effort to assess impacts, the Forest Service contracted with outside consultants for detailed economic and social impact analyses to accompany the federally-mandated environmental impact statement. These analyses attempted to address social and economic impacts that would affect neighboring lands. However, as previously mentioned, this was not initiated until after the early planning program had developed a design scheme and recreation plan for the NRA. After required by law to assess impacts, the Forest Service had to go back and examine potential consequences of its proposal.

Because of the significant time period between the initial contract and the review of the draft plan, earlier analyses (done in 1974) had to be updated for the final management plan. Summaries of these reports were actually incorporated into the environmental impact statement of the final plan. However, the use of these analyses in evaluating alternatives was vague and not well-coordinated.

Although the economic analysis was intended to "aid in the selection of a long-range direction for the NRA," (Convery and Royer, 1979, p. 1) it was deficient in providing information about the economic effects of the alternatives. The seven proposed alternatives were studied in terms of national costs and benefits, yet only minimal

attention was given to local economic impacts, such as fiscal impacts on local governments. Cost/benefit charts explained only those costs of land, construction, and internal management, rather than secondary costs to local governments (USDA, 1980, p. 65). These local government costs were addressed only with respect to the "preferred alternative" which became the final plan (Convery and Royer, 1979). This established preference by the Forest Service for one alternative over the others precluded the use of the economic assessment as a tool for objectively evaluating each alternative.

Of course, decisions cannot be solely based on a simple assessment of costs and benefits; often, it becomes difficult or impossible to translate costs and benefits into numbers for evaluation. This is especially true of social impacts where perceptions of social impacts differ among people and cannot be expressed quantitatively.

Recognizing these limitations, the social impact analysis done for the NRA was a generalized account of the social consequences of one development plan--the preferred alternative. Although it did shed light on some of the questions raised about the impacts of the NRA (by looking at the "worst-case" situation), it only analyzed the original recreation plan without addressing each formulated alternative individually. The decision made regarding the final plan could have been derived in part from a

comparison of social impacts between alternatives. However, the social impact analysis was not written or used as a decision-making tool.

Together, these two impact studies, the environmental impact statement, and an additional transportation study comprised the Forest Service's effort to assess impacts on adjacent communities. The social and economic analyses received substantial criticism, especially from the planning district staff who questioned the accuracy of the data used and the lack of specific information regarding identified impacts ("Staff Assessment", 1979). The PDC staff also objected to the lack of attention given to transportation impacts and needs (Wallace, 1981). The transportation study was not completed until after the draft plan was finally issued. A critical analysis of the content and accuracy of these reports is not possible in this research, but their role in the planning process can be discussed.

The planning process itself applies a rational thought process to decision-making--a process of analyzing alternatives and selecting one alternative plan based on this analysis. In the Mount Rogers case, alternatives were analyzed to some extent, but the final plan was not selected on the basis of these analyses. Negative public response to the draft plan and an eventual realization of the economic infeasibility of that plan actually determined

the Forest Service's final decisions. The impact assessment process was not structured so that it affected decisions; instead, the analyses were used to generally support an earlier decision.

Additionally, there was a lack of continuity and clarity regarding the use of the assessments as a part of the overall plan. This may have been due in part to the involvement of outside consultants who were unconnected with the rest of the planning process. Although alternative plans cannot always be evaluated by a simple analysis, there should be a consistent logic as to how alternatives are chosen and a clear understanding of what goes into those decisions. The Forest Service lacked a consistent and clear methodology during this step of the planning process. In addition to generating confrontations with regional planners, this problem disgruntled and discouraged local officials who had little understanding of and little input into the evaluation of alternatives.

Some local officials and regional planners also criticized the lack of mitigative measures proposed to deal with the adverse effects of the Forest Service's proposal. The draft unit plan did not sufficiently address what actions were needed to lessen adverse effects, viewing most of these impacts as "unavoidable" and "counterbalanced" by beneficial effects (USDA, 1977, p. 14). With the modification of the proposal in the final plan, the Forest

Service continued to emphasize local responsibility for mitigation rather than federal actions (USDA, 1980, p. 67). However, the implementation of local actions as a part of the NRA plan has met with little success.

Implementation

The implementation of the plan is the crucial link in the process and actually "tests" what has preceded. Although it does not occur until later in the process, it is a step that must constantly be kept in mind throughout the process; the selected alternative must be "implementable." Implementation involves the direct action needed to carry-out a plan--whether it be actual development using fiscal resources or the control of development through regulatory action.

In trying to provide coordinated planning for communities adjacent to federal recreation areas, there exists an underlying problem regardless of how coordinated plans may be; a recommended plan would require action by different units of government. For example, a federal agency may plan for and develop a recreation facility, but must rely on state and local governments to implement road improvements to the site. A federal agency that incorporates its adjacent area into the planning process must depend on local tools to implement development plans. Coordinated planning requires coordinated implementation

and the federal agency must recognize the local role in the implementation of its plans.

Subsequently, coordinated implementation of the plan requires day-to-day interaction between the federal agency and local government officials. A capacity for analyzing and resolving conflicts that occur with implementation needs to be developed as an essential part of the continuing process. Federal recreation area planners and land managers especially need to have contact with local elected officials and other government actors in adjacent communities. These are individuals who represent the local interests and who ultimately make decisions which can either aid or hamper the implementation of the federal agency's plan. Their involvement must be constructively channelled into the early stages of the planning process so that local officials will willingly participate by the time the plan can actually be implemented.

The implementation of the Mount Rogers final management plan does require joint action between governments, especially for secondary road projects. Several roads will be forced to carry increasing amounts of traffic generated by the NRA, making improvements essential. Although a "routine working relationship" has not developed, Forest Service coordination with the Federal Highway Administration, the state highway department, and local governments has nonetheless been necessary (Blankenship, 1981).

The Forest Service has had to develop a partnership with local governments to make decisions on local road improvements, particularly with the county Boards of Supervisors, since they are the bodies that must initiate requests for secondary road funds. Although each county has its own priorities, both the Forest Service and the Planning District Commission have had to "look at the entire picture" and coordinate support for priorities related to the NRA (Brock, 1981). At least one secondary road (Route 762) has received funding using the NRA development as justification for the project and others are awaiting funding (Taylor, 1981). Secondary road projects are chiefly determined by state allocation. However, various other sources have been sought by the separate parties involved in coordinating road improvements.

Although cooperation on transportation projects has occurred to some extent, less success has been achieved in solving adjacent land development issues and in coordinating general land use planning. In addition to its reliance on local support for road improvements, the NRA plan is in many ways dependent on local land use regulations. Since it provides for intermingled ownership of land and promotes retention of the rural landscape, the plan places much emphasis on the necessity of local zoning to prevent private development. However, local attitudes toward planning and land use controls continue to hamper the

implementation of restrictions on inholdings and adjacent land desired by the Forest Service.

Most of the surrounding local county governments have been unsuccessful in their attempts to implement zoning as a tool for controlling land use. The model zoning ordinance proposed in the early 1970's by the consulting firm introduced the idea of the "highland recreation zone". This restrictive zoning district was intended to be used chiefly for forest inholdings left in private ownership. Washington County has been the only surrounding jurisdiction to adopt such an ordinance, although another county, Wythe County, has developed a similar ordinance which is waiting on impendent approval by the county board. The following map (Figure 3) shows the status of local land use controls in surrounding counties. (Neither of the two incorporated towns, Troutdale or Damascus, have zoning regulations.)

Although Washington County has adopted the highland recreation zone concept in its zoning law, the district applies only to land within the NRA boundary. The areas adjacent to the NRA and along major entrance roads remain in an agricultural district, which by permitting motels, campgrounds, restaurants, and other types of development, is much more permissive than the recreation zone. Additionally, the recreation or conservation zone adopted by Washington County allows for a much smaller residential

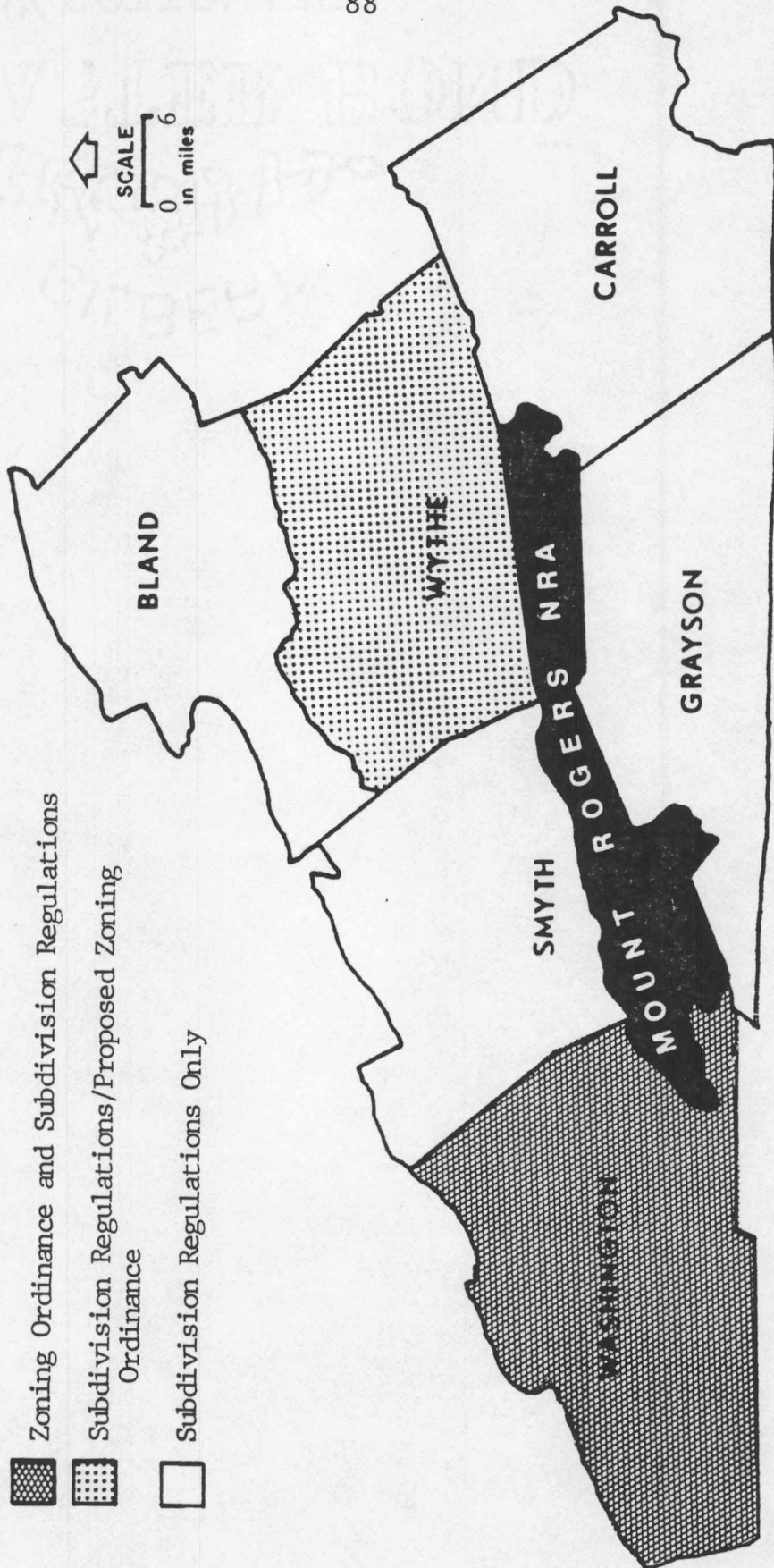


Figure 3. Local Land Use Controls in Counties Surrounding the NRA

lot size than proposed in the model ordinance (Melancon, 1981). Although not the strict regulations that the Forest Service desired, the Washington County ordinance does exist as a compromise between the federal agency and one local government.

Wythe County also has received help from the Forest Service in developing a conservation zone adjacent to the NRA, although it is concerned about general growth county-wide rather than NRA-related development (Taylor, 1981). The other three surrounding counties have not adopted the model ordinance desired by the Forest Service and proposed by the consulting firm. In fact, Grayson, Carroll, and Smyth Counties have been very unreceptive toward any form of zoning. Often, residents in these and other counties view zoning as "something the Forest Service wants," rather than a local effort to protect the land (Taylor, 1981). In addition to opposing land acquisition by the Federal Government, they do not support any attempt that takes away individual control of the land.

Because of this strong opposition to land use regulations, the Planning District Commission has been reluctant to "push" local zoning as the solution in areas such as Smyth County. Instead, it is proposing that growth and development be controlled through the phasing of capital improvements such as schools, utilities, and roads (Taylor, 1981). The use of more nontraditional means of controlling

land development (such as capital improvements programming) may be more successful in these adjacent rural areas where zoning is so vehemently opposed.

The problem the Forest Service is now confronted with during implementation--this local opposition toward acquisition and regulation of the land--was probably inevitable due to the local perceptions of land and its ownership rights. However, the Forest Service could have quelled some of that opposition by involving the local governments more during the early planning effort. Instead, they proposed the implementation of local land use regulations virtually without any prior planning for the surrounding area and inholdings subject to these regulations and with little involvement of local communities in the planning process. The outside area was not incorporated into the process in the initial problem analysis and goal formulation steps, yet was depended on in the implementation of the plan. More logically, actions such as land use controls should have followed from a specific plan for development for the adjacent area.

The implementation of the actual on-site plans for the NRA requires direct action by the Forest Service and depends on federal funds made available for development of the area. Each developed recreation site proposed for the NRA has been given a priority listing in the final management plan. Before each site is developed, the Forest

Service conducts an individual environmental assessment of the planned facility. This environmental assessment is essentially part of the plan evaluation, another phase of the planning process.

Continual Evaluation

The planning process is not static, but should allow for the continual review of the plan elements. The outcomes of the process are continually monitored so that the process itself can be evaluated in terms of how it is meeting the initial planning goals and objectives. Based on this evaluation, changes and modifications may be made to the goals and objectives or the selected plan alternatives.

Although a local government is not generally involved in the direct implementation of on-site plans for a federal recreation area, it is affected by the plan implementation and its off-site impacts. Therefore, the continual monitoring of these impacts is crucial to coordinated planning efforts. This monitoring of impacts should indicate necessary mitigative measures to be taken by both the federal agency and local governing bodies. Ultimately, the development of new alternatives that will prevent adverse impacts should evolve from this continual evaluation.

The environmental assessment is viewed as a way to "exercise self-control and restraint [by checking] earlier conclusions and input into the plan" (Blankenship, 1981).

It is essentially a second-level of planning that views an individual site, solicits additional input about the design of the site, and provides specific design plans. Through the environmental assessment, the Forest Service reassesses the demand for the particular facility and checks its consistency with the final management plan (Blankenship, 1981). In this way, it provides an incremental evaluation of the overall plan for the NRA.

This evaluation process, however, does not necessarily occur after the development of each recreation site, as there exists no established procedure for the monitoring and evaluation of adjacent impacts that might occur due to the development. Understandably, the low level of development now planned for the NRA does not presently generate much concern for adverse impacts such as the stimulation of uncontrolled development. However, continual review of Forest Service decisions is necessary and monitoring of impacts is important for both local communities and the Forest Service.

Monitoring of water quality is done through the State Water Control Board and the state highway department takes annual traffic counts on secondary roads. These reports are used by the Forest Service in reviewing recreation sites, yet no studies have been done or are planned that monitor adjacent land development trends. The Forest Service would probably become involved in this type of

monitoring if more growth occurs in the future, but because the problem is not at a crucial stage, resources have not been allocated for that purpose (Blankenship, 1981).

Since the implementation of the final management plan for the NRA has just begun recently, evaluation of the entire plan has not occurred. The National Forest Management Act (NFMA) passed in 1978 does provide a mechanism for plan evaluation on a broad scale. At this time, however, it is uncertain what plan elements may change due to long-term "programmatic review" of the NRA plan (Blankenship, 1981). This programmatic review of the NRA plan should not only reassess recreation demand, but should continually reassess consequences for adjacent communities resulting from the implementation of present alternatives and from the development of new alternatives. Local officials from surrounding jurisdictions should be included within any evaluation or review process.

Current Involvement of Local Officials

Since the publication of the Mount Rogers Final Environmental Impact Statement and Management Plan, the Forest Service has increased their efforts to involve local government officials in the implementation and continual evaluation of the plan. The environmental assessment process is primarily designed to give local residents and their elected representatives an opportunity to review

and comment on more specific plans. Since the actual implementation of plans occurs at the district level (as opposed to the supervisor's office in Roanoke), most of the contact that local officials have is with the Forest Service personnel at the closer level. In fact, a Forest Service employee from the ranger's office near Marion now serves as a liaison officer to the surrounding jurisdictions, attempting to make periodic contacts with local government officials and other interested citizens.

Through this position the Forest Service provides a channel for information exchange between itself and local governing bodies. The liaison officer sees local representatives at Planning District Commission meetings and works through channels already established by the PDC. Generally, these representatives along with local supervisors and planning commissioners are more accessible to Forest Service personnel than county administrators (Dunagan, 1981).

While the previous liaison officer was responsible for coordinating planning and information-sharing between the PDC and the Forest Service, the present position consists of more day-to-day public relations work with a variety of outside groups (of which local government is only a part). Although it serves a valuable coordination function for plan implementation, the liaison position does not deal with continual plan evaluation in terms of

adjacent land use issues. In attempting to make quarterly contact with a long list of outside interests, as well as spend time on visitor services, the liaison officer cannot concentrate much time on planning and land use conflicts with local governments. On some occasions, the resolution of such conflicts has been delegated up to higher level personnel rather than to the liaison officer diluting the position of liaison itself (Dunagan, 1981).

Because of his other duties and responsibilities, his job is limited to responding to problems as they occur rather than to planning in anticipation of what might occur. Although the use of the liaison position for planning purposes was most needed in the early planning stages, the present position still offers an opportunity for the Forest Service to continue coordination throughout the implementation and evaluation of the plan. Local officials however, were not familiar with the liaison's role and duties. (Some of those interviewed for this study were unaware of such a position fourteen months after the position was created.)

Local officials have a mixed response toward the Forest Service's present efforts to involve them in plan implementation. Generally, however, there is a feeling that the Forest Service is working harder to insure their involvement and support as compared to earlier years. Disagreements and problems that resulted during the unit

planning era between federal and local officials have left a strained relationship in many cases. In some ways, the Forest Service is now committing more time and resources toward "starting afresh" at developing better understanding and coordination (Dunagan, 1981).

Some local officials, however, believe that there is still not enough input from locals and there remains too much emphasis on the Planning District Commission rather than the local governments. At the same time, they realize that this lack of input is just as much their fault as that of the Forest Service. Local residents who have experienced past helplessness in the face of the Federal Government tend to take an apathetic view of their involvement. One county administrator commented that local governments generally felt that dealing with the Forest Service was a "struggle they couldn't win," since they perceived that federal decisions were made removed from them. "If they felt like [their] input was effective, they would be more likely to participate" (Young, 1981).

The Forest Service feels that it has done a superior job of seeking local involvement throughout the process and that local input was effective (Blankenship, 1981). The differences in perspectives between federal and local officials is understandable, however these perceptual and attitudinal differences serve as a major barrier toward resolving conflicts and implementing an effective,

coordinated planning effort. Day-to day interaction between the two bodies during the implementation and evaluation stages of the process can help to overcome this barrier. A common understanding should be built upon and developed over a long period of time. Hopefully, future planning for the NRA will be geared toward creating this common understanding through negotiation and greater interaction with local officials and residents.

Summary and Conclusions

In evaluating the coordination effort in the Forest Service planning process for the NRA, several deficiencies or shortcomings have been identified. At the same time, this research has recognized barriers to coordination that hindered a successful attempt by the Forest Service at coordinated planning for adjacent lands. Aids to coordination and any beneficial outcomes of coordination were overshadowed by these sometimes inevitable barriers.

At the outset of the development of the Mount Rogers National Recreation Area, Forest Service officials and local citizens saw an early need for coordinated land use planning. These concerns were expressed through the organization of the Citizens' Development Corporation and eventually the Mount Rogers Planning District Commission (PDC). The presence of this regional agency served as a major aid to early coordination efforts between the Forest Service and local governments.

The Forest Service began "on the right foot" by supporting the Planning District Commission which provided an essential network of communication among local government officials. The Forest Service relied heavily on the PDC for its coordination function as well as its information resources. This early coordination effort brought about several planning studies done by the PDC that were related to the NRA development. In exchange for this early support and cooperation through the PDC, the Forest Service enjoyed local support for its initial recreation plan.

However, this mutual exchange did not last. As the planning process proceeded, the Forest Service became more withdrawn in its approach. Most planning had to be done in the Roanoke office removed from the local area. The liaison position, although a good concept, was never successful in achieving its intended purpose and was eventually terminated altogether. When the PDC began working toward other purposes unrelated to the NRA, no other regional organization existed that could effectively replace its original role in coordination and planning for the lands adjacent to the NRA.

Without continuing contact with adjacent communities, Forest Service coordination during the unit planning process suffered. The Forest Service in its planning process failed to provide coordinated elements necessary for

the consideration of adjacent lands. The following were the major deficiencies or shortcomings of the Forest Service effort identified by this case study:

1) The planning process did not adequately identify adjacent land use issues and problems and incorporate them into the planning program for the NRA. Recognized early as an opportunity rather than a problem, adjacent land development was not analyzed as being potentially detrimental to local communities (but only as being undesirable in terms of its effects on the NRA design concept). When required by law to assess impacts of the NRA development later in the process, the Forest Service identified adjacent land use changes and other secondary impacts as major issues. However, the plan did not respond to these issues by providing means to alleviate the problems. A formal identification of issues and addressing of problems occurred only after the draft plan was published. These issues were direct responses to the draft rather than early recognized concerns of the Forest Service.

2) Goals were not formulated to address potential adjacent land use problems. Although the Forest Service supported "complimentary development" on private lands, it did little planning to implement that concept, viewing that as only a local responsibility. Goals followed throughout the planning process and used for evaluation alternatives reflected legislative guidelines for the

internal development of the NRA only. Consideration of the compatibility of these goals with local goals and objectives was largely excluded from the process.

3) Data collection as a step in the planning process was not done comprehensively to include adjacent lands and the exchange of information between the Forest Service and the PDC was not successful. Generally, the Forest Service was concerned only with properties within the boundaries of the NRA. It failed to collect information on the adjacent area other than the five-county region. This data base was not especially useful in relating to specific areas that would be affected by the NRA. The PDC did contribute some early studies on adjacent lands and was relied on as a source of data on the local level. However, problems were experienced in keeping the information up-to-date. There was no established agreement between the Forest Service and the PDC for on-going data collection and exchange of information as a part of the planning process for the NRA. The creation of a liaison position as a step toward this exchange proved ineffective.

4) An assessment of impacts on adjacent lands and local governments was not logically incorporated into the planning process for the NRA. Although NEPA mandated an environmental impact statement and the Forest Service also did economic, social, and transportation studies, an early design plan for the NRA had already been formulated when

these developments came about. This early plan, based on legislative direction and early public attitudes, was then re-examined in terms of its impacts on both the natural and socio-economic environment. The social and economic studies, however, were not structured into the planning process as a means for evaluating each alternative, and therefore failed to be determining factors in the actual decision-making. (Public response to the draft plan and fiscal constraints were the determining factors.) Although the social and economic assessments did recognize potential adverse impacts of the Forest Service's "preferred alternative" on local communities, the final plan neglected to provide for constructive, mitigative actions other than recommending local actions.

5) The planning process failed to provide a consistent, ongoing role for local officials so that local support for the plan suffered. During the early planning years, local officials were generally very interested and involved in the Forest Service's plans for the NRA. Meetings were held with local boards and the Forest Service tried to solicit ideas from these local officials. However, with the advent of the structured unit planning process, the planning and decision-making process for the NRA became more removed from the local governing bodies. Communication with local officials consisted of occasional briefings rather than any major involvement in planning.

In fact, most local officials were unaware of the content of the general management plan until after the publication of the draft document in 1978. This neglect of the local bodies resulted in a feeling of alienation from Forest Service activities and hindered the achievement of coordinated implementation.

In general, the Forest Service lacked continuity in going from goals to implementation and did not consider elements that should have been considered throughout the process. Although some specific incidents have been solved through negotiation and some compromises have been made, the overall planning process for the NRA has not been an effective vehicle for negotiation and compromise. Creating conflict rather than solving it, the planning process itself became an object of controversy in the late 1970's. This situation led only to problems for the Forest Service and a strained relationship between the Forest Service, the PDC, and the local governments.

Although these problems were partially a result of deficiencies in the Forest Service planning process itself, several barriers existed that worked against the Forest Service and ultimately prevented a successful coordinated effort. Some of these factors were inevitable and had to be recognized as "givens" by the Forest Service, while others were obstacles that could have been overcome, although not necessarily by the Forest Service alone. It

is interesting to note that this research found that often the local officials themselves recognized these barriers facing the Forest Service. The following discussion enumerates these particular factors:

1) Lack of Local Resources. Local government officials lacked time and resources to understand the Forest Service planning process and to become involved in its activities. Local governments without planning staffs were especially burdened with the task of reviewing technical Forest Service plans. With numerous other day-to-day problems to solve, local bodies often were unable to devote enough attention to the NRA development.

Because of this problem at the local level, the Forest Service chose to work chiefly through the PDC rather than the local jurisdictions. Although the PDC provided a legitimate vehicle for dissemination of information to the local governments, often this "filtering" did not adequately occur. Communication with staff planners did not give an accurate picture of the local government situation and coordination suffered from the lack of contact with local government officials who make decisions.

2) Public Image of the Forest Service. The bureaucratic image of the Forest Service frustrated local officials and hampered effective coordination. Local residents often held an apathetic view toward their involvement in Forest Service planning due to a lack of

effectuation. Many officials felt that decisions were made regardless of local input and therefore they tended to contribute little to the process, even if given an opportunity. Past negative experiences with the Forest Service and other federal agencies (including the National Park Service) served to intensify these feelings.

3) Polarity of Local Opinion. There were numerous jurisdictions to coordinate with and a divergence of opinion among government officials regarding the NRA and its development. In attempting to assess local attitudes, the Forest Service faced an extreme polarization of interests. This made the local situation especially volatile and difficult to deal with in an open, cooperative manner.

4) Limited Federal Resources and Expertise. The Forest Service was unable to provide enough resources for a coordinated planning effort involving adjacent communities. Resources were expended for such purposes, but only in piecemeal fashion and resulting in little success (the liaison concept, for example). The Forest Service was faced with problems wider in scope than merely forest and recreation management. Although career professionals with the Forest Service, those involved in planning for the NRA lacked experience in rural and regional planning. This was one factor that fostered misunderstandings and confrontation between the Forest Service and the planning district staff planners.

5) Changing Federal Procedures and Requirements.

Frequent changes in federally-mandated procedures for planning tended to disrupt the continuity of the process. Even though these changes were often beneficial toward increased coordination with other governing bodies, they caused discontinuity as the Forest Service would attempt to respond to new regulations and leave old requirements behind. General confusion resulted over new guidelines and may have hurt the public image of Forest Service activities.

6) Extended Time Period for Plan Development. The length of time involved in the development of a long-range management plan for the NRA contributed to a lack of continuity and other problems. The Forest Service was forced to deal with a change of sentiment over the years of the planning process. It experienced problems in keeping information up-to-date and because of a failure to do so, it faced negative response when the draft plan was finally issued in 1978.

All of these barriers existed that hampered a successful planning and coordination attempt by the Forest Service. However, perhaps the greatest barrier was a perceptual one. The Forest Service planning process was never able to deal with or overcome the divergence of attitudes, perceptions, and philosophies between local residents and federal personnel.

Even though local opinion was often not unified regarding the development of the NRA, the outlook of most local officials centered on their immediate situation. If they were in favor of the NRA and large-scale development, it was because they saw the immediate benefits to their communities from increased visitation and sales tax revenues generated. If they were opposed to the extent of development proposed in the draft plan, it was due to their fear of such adverse impacts as increased traffic on county roads, more costs to local governments, and a loss of local revenue from property taxes. It was generally the economic factors that were deemed the most important to these local officials--whether as positive or negative impacts.

On the other hand, the Forest Service was understandably more concerned throughout the process with the long-term protection and preservation of natural and cultural resources of the NRA and its surrounding area. They stressed local economic development as an outcome of the NRA, but at the same time, worried that this development, if not controlled, could be detrimental to their resources in the long run and therefore counterproductive to their goals and objectives for the NRA.

The Forest Service planning process, intended to be an example of coordination and cooperation with adjacent local governments, did not sufficiently address this

conflict between local needs and goals and the national objectives for the NRA. The strained relationship between the Forest Service, the PDC, and localities prevented attempts to draw up common goals for the NRA that incorporated the problems and needs of the local communities without sacrificing the national objectives. The Forest Service and the local governments may have recognized the potential for growth due to the NRA, but little actual planning was done to take advantage of that potential or to prevent possible consequences of that growth on the localities. Providing recreation facilities that were desired by the local residents was not the only answer to incorporating local needs into the federal planning process.

This was probably the ultimate shortcoming of the Forest Service planning process. National goals and internal objectives derived from legislative history were considered unchangeable throughout most of the planning process. As the Forest Service developed plans to meet those goals and objectives, it became less and less responsive to local opinions, problems, and needs. It was not until negative public reaction was received and the fiscal constraints were realized that the original design concept for the NRA was modified.

This poor overall performance in planning by the Forest Service stimulated a highly emotional issue and resulted in the expenditure of additional time and resources

in an attempt to "correct the mistakes." In essence, the Forest Service planning process was forced to be reactive at times rather than progressing from one step to the next.

Future Outlook and Recommendations

Although coordinated planning for adjacent communities in this case has not been a successful example, the end-result has not been an entirely negative situation. Rapid, unplanned growth reminiscent of Gatlinburg, Tennessee and other "gateway" communities has not yet occurred near Mount Rogers National Recreation Area. Communities surrounding and within the NRA have generally been spared from an influx of tourists and newcomers. In fact, because of the low level of development now proposed for the NRA and the present economic situation, the threat of adjacent commercial and residential development is much less intense than earlier anticipated. The problem most counties are now experiencing is the presence of tax-exempt federal land with very little compensated generation of revenue from private development. No longer is the NRA considered an economic stimulus to the area (Convery and Royer, 1979). Ironically enough, because of the economic slow-down, local sentiment may now be swinging toward the support of more intensive development of the adjacent area (Taylor, 1981).

This slow-down in private investment, however, does not eliminate the need for continual coordination and planning between the Forest Service and adjacent communities. The Forest Service should not be "lulled" into assuming that few problems will develop now that the major planning effort is over. It must stay aware of its continual interrelationship with communities surrounding the NRA and should develop a coordination strategy to guide its interaction with adjacent local governments.

National economic trends and federal budget cutbacks emphasize the need for such a strategy. For example, the Planning District Commission will be facing funding decreases and will be even less able to support planning activities related to adjacent lands. A valuable resource for coordination with local governments will be lost if the PDC itself becomes a "victim" to fiscal belt-tightening.

Additionally, because of budget constraints the federal government is moving toward a decrease in federal land acquisition and placing more emphasis on improving existing facilities rather than constructing new ones. This will affect the NRA and its adjacent lands in two ways. Funding problems may slow down the implementation of the NRA plan, delaying construction of new facilities and causing a less impact on adjacent communities (or at a slower rate). More time will be available for foreseeing potential land use problems and conflicts. At the

same time, however, a decrease in land acquisition monies will force the Forest Service to deal more actively with the intermingled land concept in its future development and management of the NRA. More emphasis must be placed on planning for adjacent lands and inholdings as more conflicts will develop between preservation and development of those lands.

With local governments retaining jurisdiction over some of the originally-proposed NRA land, Forest Service officials will be forced to work with those governments to insure the best solutions to adjacent land use problems. At the same time, however, they must recognize the needs and problems experienced by both the private landowner and the entire local community. Many of the local residents want to maintain the potential use of their land for development purposes and object to any degree of conservation-type of zoning. Mutual understanding and compromise will become the necessary keys for solving conflicts between the two levels of government. However difficult or seemingly impossible, attempts must be made to understand and overcome some of the barriers to coordination, particularly the national versus local dichotomy of attitudes and perceptions.

This research has not attempted to propose any profound means for the Forest Service to deal with these barriers. Since its budget and operations are ultimately

determined by Congress, any federal agency has its "hands tied" much of the time. Forest Service personnel may wish to do more in terms of coordination and planning, but are limited by budgetary and procedural restrictions. The following recommendations, therefore, are not necessarily solutions to the larger obstacles to coordination, but can be viewed as suggestions for better coordination and improved Forest Service planning for adjacent lands. They relate chiefly to the implementation and continual evaluation of the adopted Final Management Plan, but should apply also to any new planning initiative taken by the Forest Service for the NRA. The recommendations are:

- 1) The Forest Service should make extra efforts to involve local officials in their activities, viewing their ideas and opinions as representative of local residents. Semi-annual meetings should be held with the board of supervisors and planning commissions of each county. These should be special meetings (not on the regular agenda) and should involve a mutual exchange between the two levels of government. The Forest Service should present its activities to the local bodies, and local planning and zoning issues relevant to the NRA should be discussed. Local governments could be encouraged to present an annual or semi-annual report to the Forest Service on these issues and other perceived problems regarding the development of the NRA. Publishing a monthly or quarterly

information sheet would be another means through which the Forest Service could improve interaction and communication with local governments.

2) Local officials whose jurisdictions are within the NRA boundary or adjacent to it should be especially relied on for ideas, input, and feedback. An official committee of these representatives might be formed to serve as an advisory body to the Forest Service. This committee could be used as a coordination tool to be actively involved in current implementation and the next long-range planning process. It would be important, however, that this group function along with the PDC and its staff, rather than as a totally separate "layer" of government activity.

3) The Forest Service should continually monitor "cross-impacts" between the NRA and its neighbors. The Forest Service liaison officer should work with the PDC staff in keeping up-to-date information, especially regarding surrounding land development patterns and local growth trends. Special attention should be given to a designated "adjacent area," rather than to the entire planning district. The Forest Service should consider writing an annual report to document cross-impacts and interrelationships between the NRA and adjacent localities.

4) The Forest Service should expand the use of "memorandums of agreement" with local jurisdictions and

with the Planning District Commission. This may involve anything from a proposal for solid waste disposal for one locality to agreements with the PDC for research studies. An increased amount of joint action proposals and cost-sharing arrangements would necessitate coordination and interaction and provide opportunities for trade-offs between the federal and local units of government.

5) Future planning efforts for the NRA should rely more heavily on the planning expertise and support of the Mount Rogers Planning District Commission. For example, rather than involving outside consultants, impact assessment studies could be more effectively done "in-house" by the PDC staff planners who would be more familiar with the area and have access to necessary data. The Forest Service should consider a contract arrangement with the PDC for such a proposal.

6) The Forest Service should continue to redefine its goals and objectives for the NRA by being responsive to local problems and needs. The Forest Service should continue to improve its relationship with local officials and seek to enhance its overall public image. Allowing the liaison officer more time for "county coordination" would be one way to enhance and improve this relationship.

7) The Forest Service should attempt to formulate a more comprehensive data base on its lands and surrounding lands, especially private inholdings. Again, this

would involve liaison work between the Forest Service personnel and the PDC staff.

Of course, continuing budget restrictions facing the Forest Service may actually prevent the implementation of some of these recommended actions. Realizing this, Forest Service personnel need to make prudent decisions regarding the expenditure and channeling of resources. The importance of planning and coordination with adjacent lands should be emphasized and available resources should be directed toward planning for these lands. Ultimately, a successful strategy for coordination will prevent the waste of resources between the local governments, the PDC, and the Forest Service.

CHAPTER VI

GENERAL CONCLUSIONS ABOUT "ADJACENT LANDS PLANNING"

The major impetus for this research has been the growing land use problems and conflicts being experienced on lands adjacent to federal resource lands, particularly federal recreation units. These problems concern both the local communities which experience direct and indirect impacts from the presence of the federal unit, and the federal land agencies which must cope with resulting consequences on their resources from these impacts. As may often be the case, the federal land agency's actions in terms of its development plans can actually affect adjacent land use and contribute to related environmental, social, and economic impacts on surrounding communities.

Building on this apparent problem, this study has assumed that the federal land agency should be responsible for initiating a coordinated planning process that considers adjacent private lands and involves local officials who represent adjacent landowners and other local residents. In literature cited earlier (Culhane and Friesma, 1979), it is argued that federal land use planning is significantly different from the familiar planning process at the local government level, and therefore these differences cause problems in trying to coordinate planning efforts. However, this research has assumed that the processes are not

so different, and in fact has used a traditional planning model to organize and evaluate certain coordination aspects of the Forest Service planning process for the Mount Rogers National Recreation Area in Virginia.

Essentially, this author contends that by including particular elements of coordination in its planning process, the federal land agency can better relate to local planning and respond to local concerns. By using a case study approach, an examination of one federal agency's attempt at coordinated planning was undertaken. This case study revealed some general conclusions that could be applicable to similar situations.

Case Study Implications and General Conclusions

The Forest Service as the federal land agency in this case experienced tremendous problems in attempting to provide a coordinated planning process for Mount Rogers National Recreation Area (NRA). Significant shortcomings in the Forest Service planning process contributed to a highly controversial situation and ultimately a "failure" at coordination and planning for adjacent lands. However, all blame cannot be laid at the Forest Service's doorstep. The problems experienced were perhaps typical of other efforts that attempt to bring together different levels of government or different interest groups. The research findings indicate that the NRA planning effort was in part hampered

by the absence or inadequacy of coordination elements in the Forest Service process, but was also affected by factors that provided significant barriers to coordination.

One reason for a coordinated planning process for federal recreation areas is to address issues of adjacent land use. Particularly in the case of a large developed facility, recognition needs to be given by the federal agency to private development stimulation as a direct impact of the recreation facility (and to other impacts on nearby communities associated with that development stimulation.) In the case study, the Forest Service initially neglected to consider problems for adjacent communities caused by its plan and did not incorporate this concern into the planning program for the NRA until much later in the process. It attempted to provide a coordinated planning effort, but did not include planning activities that should have concerned adjacent land and involved local governments. Faced by several barriers, the Forest Service was unable to provide this coordination.

The most difficult obstacle faced in such a situation is the perceptual differences between federal and local officials in their attitudes toward land development and planning. The basic goals and policies of the two differ and this creates conflict in coordinated planning for adjacent lands. Other more institutional types of barriers may exist that hinder a federal agency in coordinating its

plans with local communities. These factors include: limited federal resources for planning, a polarity of opinion among local jurisdictions, a local resentment toward the federal bureaucratic image, and a lack of local acceptance of planning and land use controls.

Although this study proposes certain coordinated activities that should occur as a part of the planning process, each federal recreation area will experience unique barriers and problems and must develop its own strategy for coordination. In the case of a large recreation facility in a rural area, this strategy is especially important. Limited local resources for planning and negative attitudes toward land use controls provide special obstacles that must be recognized. The federal agency cannot neglect the local governments simply because they have limited resources for planning. The task of the federal agency becomes more difficult as local goals and concerns must be solicited from local officials and other residents, rather than easily determined from an active planning program and written plans.

Another barrier recognized by this case study is a common problem in rural planning; the presence of both long-term residents and newcomers in a community makes a consensus on goals and objectives very difficult. This divergence of opinion surfaced in the Mount Rogers case and was an unexpected problem for the Forest Service.

The Forest Service in its coordination attempt faced not only conflict with local governments but conflict among local interests. The result was a "blown-up" controversial situation that left many interests still unsatisfied and disenchanted.

Because of these barriers to coordination, the federal agency's job becomes more difficult in providing a coordinated planning process. In the case study, the Forest Service did not have the capability to undertake a comprehensive planning process for both the NRA and its adjacent lands. It relied heavily on the regional planning district for adjacent lands planning, but communication and coordination with this agency proved to be a crucial problem throughout the Forest Service planning process.

The federal agency can and should initiate a coordination strategy within its planning process. However, it cannot solely provide comprehensive planning for adjacent lands. It must rely on local and regional planning bodies and local governments, and must develop a working relationship with these outside entities as a part of the planning process. In the case study, this working relationship did not develop, and a breakdown in coordination resulted.

Ultimately, it was not so much a difference in "process" as a difference in desires, goals, and concerns between Forest Service land managers and local residents

that culminated in the problems experienced at Mount Rogers National Recreation Area. Although the Forest Service planning process for the NRA involved a series of steps similar to the traditional planning process model, it did not adequately involve adjacent lands and local concerns within those steps. The Forest Service did not sufficiently address and plan for the potential land use impacts and related problems that could have resulted from its original proposal for the NRA. The inability to resolve differences between the federal agency, regional planners, and local people regarding land use and development issues hampered the entire planning process for the NRA and its adjacent lands.

In future planning efforts for federal recreation lands, means need to be developed to resolve these differences in goals at the outset of the federal planning program. Impacts and interrelationships between the federal recreation area and its neighbors need to be considered, studied, and documented. The federal agency's planning activities need to be expanded to include comprehensive data collection on adjacent lands and a measuring of adjacent impacts of proposed alternatives before final decisions are made. Regardless of the intergovernmental arrangements and coordination necessary for adjacent lands planning, the federal agency must remain responsible for adjacent lands within its established planning process.

Close attention should also be given to problems in terms of plan implementation. A federal agency cannot expect local governing bodies to "rubber stamp" a recreation project such as Mount Rogers NRA and subsequently implement recommended land use controls for the surrounding area. While the federal agency may have the authority and funds to implement its development plans, local governments are often prevented from taking immediate actions due to the varied interests they must serve.

In the case study presented here, the Forest Service tried to implement a plan that necessitated local land use controls, yet failed to recognize that local governments might not accept zoning or be able to implement it because of public opposition. In addition, too much emphasis was placed on the implementation of the congressional act that established the NRA, ignoring changing local sentiment until later in the planning process. The act and pursuant legislative records were treated as the plan for the area without consideration of the feasibility of such a development.

In establishing new federal recreation areas, special attention should be given by the federal land agency to adjacent lands planning by initially considering the feasibility and impact before establishment of an area. A rural area that lacks planning and land use controls will be more vulnerable to adverse impacts from recreational

development. Obviously, however, this thesis does not suggest a curtailment of federal recreation development in rural areas. Many rural areas today provide the open space and scenic attractions desirable for recreational use, and these areas are often in need of economic development generated by recreation. However, during the establishment of such a development, alternatives should be weighed carefully in terms of their adjacent land impacts and a coordination strategy with local governments and regional planning agencies should be proposed that will continually guide interaction between levels of government.

Not until recently have the federal land agencies such as the Forest Service provided their own direction or guidelines for more coordinated planning. With the passage of the National Forest Management Act in 1976, for example, national forest plans have to be coordinated with plans and policies of state and local governments. Additionally, a change in traditional federal land acquisition policies has begun to place more emphasis on joint federal, state, and local arrangements for planning and administration of large recreation areas, rather than complete federal control that has existed in the past. The "green-line parks", for instance, is a concept implemented by the National Park Service and involves a mixture of private ownership and local land use controls with federal ownership. Even long-established federal areas, such

as Shenandoah National Park in Virginia, are giving consideration to buffer areas or "cooperative zones" outside their borders.

These new developments in federal land management and planning have in part been a result of greater recognition of land use interrelationships that exist between federal lands and adjacent communities. Federal land agencies have realized in most cases the need for a coordinated planning effort. The success of such an effort, however, depends on a federal land agency's capacity to integrate local concerns and local planning issues into the federal planning process. Although necessary, federal agencies will not find this job easy, due to numerous barriers to coordination with local governments. However, in the case of a federal recreation area in which development stimulation is a potential impact, coordinated planning for the adjacent area must be an integral part of the federal planning process.

Areas for Future Research

Unfortunately, it has not been possible within the scope of this research to make a critical analysis of the entire planning history associated with the Mount Rogers National Recreation Area. Since this thesis has intended to analyze the Forest Service's actions only, information about the role of the regional planning district and the various citizens' groups that were involved has been

limited. Further research into their role and of other case study examples could provide more information about the coordination of federal recreation area planning with adjacent communities.

Although barriers exist that affect federal/local coordination, these barriers are certainly not insurmountable. Likewise, this case study was not intended to "prove" that there cannot be successful efforts at planning for adjacent lands. Other federal recreation areas could provide different situations to be studied. For example, the Big South Fork National River and Recreation Area in Kentucky and Tennessee, although much newer than Mount Rogers NRA, is located in a rural area similar to the Mount Rogers region. Both the Army Corps of Engineers, which was responsible for the development of the area, and the National Park Service, the administering agency, have coordinated well with the regional planning districts in both states, and the regional planners have conducted impact studies and needs assessments for the adjacent communities (Green, 1981). Of course, more study would be required to investigate this case and to compare the two situations more closely. Research comparing various intergovernmental arrangements for adjacent lands planning would be a worthwhile endeavor.

In the Mount Rogers case study, regional planners expected the federal agency to provide detailed information

about the impacts of its plan on adjacent localities. However, federal agencies such as the Forest Service are often at a loss for assessing such impacts as development stimulation and local tax revenue effects of their plans and policies. More research is needed to compare impacts that have occurred in other situations. With this information a federal agency can develop more accurate data on possible impacts of its proposed developments.

Even if a federal agency is fortunate enough to have detailed data, it may face an "uphill struggle" in dealing with perceptual barriers and differences between federal goals and policies and local attitudes. Conflict resolution ideas and methods that would bring together these "sides" need to be studied and tested. However difficult, "inroads" must be made in overcoming the barriers to coordination, so that adjacent land use problems and conflicts can be resolved now and adjacent lands planning can be successful in the future.

LIST OF REFERENCES

LIST OF REFERENCES

Books and Reports

- Burby, Raymond J. Second-Homes in North Carolina: An Analysis of Water Resource and Other Consequences of Recreational Land Development. Chapel Hill: UNC Center for Urban and Regional Studies and Water Resources Research Institute, December 1979.
- Drucker, P. Impact of A Proposed Reservoir on Local Land Use Values. Lexington: Kentucky Water Resources Institute, 1972.
- Recreation Planning Associates. Mount Rogers Impact Area Comprehensive Plan and Land Use Controls 1975-1980. Prepared for the Mount Rogers Planning District Commission, 1971.
- Robert R. Nathan Associates. Recreation As An Industry, Research Report No. 2. Prepared for the Appalachian Regional Commission, Washington, D.C., 1966.
- Robinson, Glen O. The Forest Service: A Study in Public Land Management. Baltimore: John Hopkins University Press, 1975.
- Shands, William. Federal Resource Lands and Their Neighbors: An Issue Report. Washington, D.C.: The Conservation Foundation, 1979(a).
- Shands, William and Healy, Robert. The Lands Nobody Wanted: Policy for National Forests in the Eastern United States. Washington, D.C.: The Conservation Foundation, 1977.
- Shands, William and Woodson, Patricia. The Subdivision of Virginia's Mountains: The Environmental Impact of Recreational Subdivisions in the Massanutten-Blue Ridge Area, Virginia: A Survey and Report. Washington, D.C.: The Central Atlantic Environmental Center, 1974.

Articles and Papers

- Cooper, Arthur, Wise, Robert, and Shands, William. "Forest Service Coordination with State and Local Governments" in A Citizen's Guide to the Resources Planning Act and Forest Service Planning. Washington, D.C.: The Conservation Foundation, May 1980, pp. 185-204.

- Culhane, Paul and Friesma, H. Paul. "Land-Use Planning for the Public Lands," Natural Resources Journal, Vol. 19, January 1979, pp. 43-44.
- Healy, Robert and Short, James L. "Rural Land: Market Trends and Planning Implications," Journal of the American Planning Association, Vol. 45, No. 3, July 1979, pp. 305-316.
- Mosena, David. "A Report on Recreational Land Development," Planning, December 1972, p. 297.
- Mosena, David and Popper, Frank. "Leisure Homes Urbanize the Countryside," Planning, August 1973, pp. 18-20.
- "NPCA Adjacent Lands Survey: No Park Is An Island," NPCA Magazine, Vol. 53, No. 3, March 1979, pp. 4-9.
- "NPCA Adjacent Lands Survey: Part II," NPCA Magazine, Vol. 53, No. 4, April 1979, pp. 4-9.
- "NPCA Adjacent Lands Update: No Park Is An Island," NPCA Magazine, Vol. 53, No. 11, November 1979, pp. 21-22.
- Prost, James. "Craig County: Public Land Ownership and the Problems of Economic Development," Environmental Comment, February 1979, pp. 15-18.
- Sax, Joseph L. "Helpless Giants: The National Parks and the Regulation of Private Lands," Michigan Law Review, Vol. 75, December 1976, pp. 239-274.
- Sax, Joseph L. "Buying Scenery: Land Acquisitions for the National Park Service," Duke Law Journal, Vol. 1980, No. 4, pp. 709-740.
- Schultz, Edward W. "Outdoor Recreation on Federal Lands: The National Forest System," Transcript of Speech Given at the Western Resources Conference, Colorado State University, Fort Collins, Colorado, July 1972.
- Schmudde, Theodore H. "The Making of Recreational Places in East Tennessee" in Planning Frontiers in Rural America: Papers and Proceedings of the Boone Conference, eds. Ole Gade and Burton Purrington, Washington D.C.: U.S. Government Printing Office, 1976, pp. 47-52.
- Shands, William. "The Feds Can't Manage All That Land Alone," Planning, August 1979(b), pp. 13-16.

Shands, William. "Private Development and Public Land," Environmental Comment, February 1979(c), pp. 10-14.

Shands, William. "Regional and National Forest Planning," in A Citizen's Guide to the Resources Planning Act and Forest Service Planning. Washington, D.C.: The Conservation Foundation, May 1980, pp. 51-86.

Government Publications

Advisory Commission on Intergovernmental Affairs, "The Adequacy of Federal Compensation to Local Governments for Tax-Exempt Federal Lands." Washington, D.C.: U.S. Government Printing Office, July 1978.

Council on Environmental Quality (CEQ), Department of Housing and Urban Development, and Appalachian Regional Commission. Subdividing Rural America: Impacts of Recreational Lot and Second-Home Development, Executive Summary, 1976.

Johnson, Hugh, and Tharp, Max M. "Meeting the Demand for Outdoor Recreation" in A Place To Live: The Yearbook of Agriculture-1963. U.S. Department of Agriculture, U.S. Government Printing Office, 88th Congress, 1st Session, House Document No. 29.

Public Land and Law Review Commission. One Third of the Nation's Land. Washington, D.C.: U.S. Government Printing Office, 1970.

Recreation Advisory Council. "Federal Executive Branch Policy Governing the Selection, Establishment, and Administration of National Recreation Areas," Circular No. 1, March 26, 1963.

U.S. Department of Agriculture. Forest Service Manual, Section 1920, Interim Directive No. 6, as of March 10, 1980.

U.S. Department of Agriculture (USDA). Mount Rogers National Recreation Area Recreation Plan, 1968

U.S. Department of Agriculture (USDA). Mount Rogers National Recreation Area Draft Environmental Statement, September, 1977.

U.S. Department of Agriculture (USDA). Mount Rogers National Recreation Area Final Management Plan and Environmental Impact Statement, March 1980.

U.S. Department of the Interior, National Park Service.
State of the Parks-1980: A Report to Congress,
 May 1980.

Unpublished Material

Drummond, Bruce N. "Federal Compensation to Counties in the Mount Rogers Planning District for Tax-Exempt Federal Land." Unpublished Major Paper, Virginia Polytechnic Institute and State University, March 1981.

Convery, Frank J. and Royer, Jack P. "Economic Impacts of the Mount Rogers National Recreation Area: Revised Estimates." Report Submitted to the U.S. Forest Service, Duke University, September 1979.

Rhyne, Edwin H. "Social Impact Analysis for the Proposed Mount Rogers National Recreation Area." Report Submitted to the U.S. Forest Service, September 1979.

"Staff Assessment." Unpublished Material by the Mount Rogers Planning District Staff on the Social and Economic Analyses for the NRA, October 26, 1979.

Interviews and Correspondence

Argow, Keith. Former Area Ranger for Mount Rogers National Recreation Area. Written Correspondence, July 14, 1981.

Blankenship, Charles. Recreation Supervisor, Jefferson National Forest. Personal Interviews, June 11, 1981 and July 2, 1981, Roanoke, Virginia.

Branson, Bill. County Administrator, Wythe County. Personal Interview, June 18, 1981, Wytheville, Virginia. (Joint interview with Robert Johnson.)

Brickey, C.P. Chairman, Smyth County Planning Commission. Telephone Interview, August 30, 1981.

Brock, Kirby. Area Ranger for Mount Rogers National Recreation Supervisor. Personal Interviews, June 16, 1981 and July 2, 1981, Marion, Virginia.

Dunagan, David. Forest Service Ranger and Liaison Officer. Personal Interview, July 9, 1981, Marion, Virginia.

Fant, Palmer. Member, Grayson County Board of Supervisors. Telephone Interview, August 26, 1981.

Green, Gerald. Senior Planner, East Tennessee Development District. Telephone conversation concerning the Big South Fork River and Recreation Project, November 13, 1981.

Halsey, Guy W. Chairman, Grayson County Planning Commission. Telephone Interview, August 28, 1981.

Helms, Roy. Member, Smyth County Board of Supervisors. Telephone Interview, August 30, 1981.

Johnson, Robert. County Planner, Wythe County. Personal Interview, June 18, 1981. (Joint interview with Bill Branson,)

Matney, Ralph. Member, Wythe County Board of Supervisors. Telephone Interview, August 28, 1981.

McCall, Jim. Member, Washington County Board of Supervisors. Telephone Interview, August 28, 1981.

Melancon, Lionel. Forest Service official, Jefferson National Forest. Personal Interview, June 30, 1981, Roanoke, Virginia.

Moore, French, Jr. Chairman, Washington County Planning Commission. Telephone Interview, August 30, 1981.

Payne, Ralph. Chairman, Washington County Planning Commission. Telephone Interview, August 28, 1981.

Penfold, Michael. Former Forest Supervisor, Jefferson National Forest. Written Correspondence, July 2, 1981.

Perry, Marvin. County Administrator, Smyth County. Personal Interview, June 15, 1981, Marion, Virginia.

Pugh, Bill. Member, Smyth County Board of Supervisors. Telephone Interview, August 26, 1981.

Reynolds, J.L. Chairman, Wythe County Planning Commission. Telephone Interview, August 26, 1981.

Rhea, Joseph A. Mayor, Town of Damascus. Personal Interview, June 15, 1981, Damascus, Virginia.

Taylor, Tom. Executive Director, Mount Rogers Planning District Commission. Personal Interviews, June 15 and November 12, 1981, Marion, Virginia.

Tremblay, Richard. Former Senior Planner, East Tennessee Development District. Conversation concerning the Big South National River and Recreation Area project, October 1980, Knoxville, Tennessee.

Wallace, Jimmy. Deputy Director, Mount Rogers Planning District Commission. Personal Interviews, June 16 and November 12, 1981, Marion, Virginia.

Young, Don. County Administrator, Grayson County. Personal Interview, June 18, 1981, Independence, Virginia.

Federal Statutes and Regulations

Clarke-McNary Act. (43 Stat. 653, as amended; 16 U.S.C. 471(b), 499, 505, 564-570.) June 7, 1924.

Forest And Rangeland Renewable Resources Planning Act. (88 Stat. 476, as amended; 16 U.S.C. 1600-1614.) August 17, 1974.

Land and Water Conservation Fund Act. (78 Stat. 897, as amended; 16 U.S.C. 460/-4 to 460/-11, 23 U.S.C. 120 (note).) September 3, 1964.

Mount Rogers Act. Public Law 89-438. 89th Congress, H.R. 10366, May 31, 1966.

Multiple-Use Sustained Yield Act. (74 Stat. 215, as amended; 16 U.S.C. 528-531.) June 12, 1960.

National Environmental Policy Act of 1969. (83 Stat. 852, as amended; 42 U.S.C. 4321, 4331-4335, 4341-4347.) January 1, 1970.

National Forest Management Act of 1976. (90 Stat. 2949; 16 U.S.C. 472a, 476, 476(note), 500, 513-516, 521b, 528(note), 576b, 594-2(note), 1600(note), 1600-1602, 1604, 1606, 1608-1614,) October 22, 1976.

National Forest Revenue Act. (35 Stat. 260 and 36 Stat. 963, as amended; 16 U.S.C. 500.) May 23, 1908 and March 1, 1911.

"National Forest System Land and Resources Management Planning," 36 Code of the Federal Regulations Part 219, Federal Register, No. 44, September 17, 1979, 53928-53999.

Organic Administration Act of 1897. (30 Stat. 34, as supplemented and amended; 16 U.S.C. 473-478, 479-482, 551.) June 4, 1897.

Payments-In-Lieu-of-Taxes Act. (90 Stat. 2662; 31 U.S.C. 1601-1607.) October 20, 1976.

Weeks Law. (36 Stat. 961, as amended; 16 U.S.C. 480, 500, 513-517, 517a, 518, 519, 521, 552, 563.) March 1, 1911.

VITA

Born in Montgomery County, Maryland in 1957, Sally Tate Hart attended public schools in both Fairfax County and Franklin County, Virginia. She graduated in 1975 from Franklin County High School in Rocky Mount, Virginia. In May 1979, she received a B.A. in Geography from Mary Washington College in Fredericksburg, Virginia.

Sally entered the Graduate School of Planning at The University of Tennessee, Knoxville in September 1979 and received the Master of Science in Planning degree in March 1982. While in graduate school, she was a graduate assistant and a member of the Collegiate Institute of Planners. During her second year, she worked as a research assistant for the Cleveland/Bradley County Economic Development Study conducted through the University of Tennessee Planning Research Center. She was employed as an intern with the James City County Planning Department in Williamsburg, Virginia during the summer of 1980.

Presently, Sally is Assistant Planner with the Rockingham County Planning Department in Harrisonburg, Virginia. She is a member of the American Planning Association and the Rural Planning Caucus of Virginia.