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An Examination of a
Regional Approach to
Park Management in British Columbia

By

Mark R. Angelo

B.S. University of Montana 1973

A professional paper presented
in partial fulfillment of the
requirements for the degree of
Master of Forestry

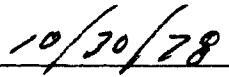
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Acknowledgments

The author gratefully acknowledges the help, encouragement, and advice received from Dr. Riley McClelland. A special thanks is also extended to Dr. K. Ross Toole and Prof. Steve McCool for their assistance in the development of this paper.

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AN EXAMINATION OF A REGIONAL
APPROACH TO
PARK MANAGEMENT

INTRODUCTION

In 1930, the National Parks Act was passed by parliament, formally placing the various federal parks of the day under one piece of legislation and dedicating them for all Canadians in the following way:

The parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to the provisions of this Act... and such parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations.⁴

In this statement, one can discern the original intent behind the establishment of the Canadian national park system. Upon continued examination however, one can also begin to understand the apparent conflict of purpose regarding the objectives of these parks as well as the controversy that has now arisen over future directions in park policy. On one side of this controversy, there are those who believe that park agencies should act only as conservators of wilderness: in support of this position,

⁴H. Eidsvik and G. Lee, National Parks - Resource Relationships and Policy Implications for Management, Weyerhaeuser Lecture Series (Lakehead Univ., 1971) p. 40.

they refer to that part of the Act which states that parks are to remain "unimpaired for future generations". On the other side of this debate, there are those proponents of park development who point to the terms "benefit" and "enjoyment", and thus argue that the primary purpose of parkland is to enhance man's use of it. Granted, preservation is, in a sense, also a form of human use (as it has no utility other than to humans), but this is generally considered to be quite different from the more traditional forms of recreation advocated by this school of thought.

Each of these groups is at times rather vocal, and rightly so, because both find ample justification for their views in the legislation that established our parks. It's simply a difference in interpretation, and this is the basis for what has become the classic argument involving the directional policies of our national and provincial parks - that of use vs. preservation.

Ideally, this confrontation would seem to indicate the need for an appropriate compromise that adequately considers both objectives. In other words, the parks would continue to be governed by a management mandate that emphasizes the maintenance of historic ecological processes. At the same time, recreational use would be permissible, but only to the extent that it does not

interfere with these processes. This would seem to be a logical solution but unfortunately, as more people seek recreation in the outdoors, it becomes clear that parkland can support only a limited number of users before its ability to meet the preservation objective is diminished. In British Columbia provincial parks, a 160% increase in day use and a 108% increase in overnight use, over the last 15 years¹⁵, illustrates the increased visitation that has been occurring in parks throughout Canada. This visitation has heightened the conflict between preservation and outdoor recreation, and, in many parks, an acceptable balance between the two is no longer possible.

In recent literature, a proposed solution to this problem has been the adoption of a broader regional approach in planning outdoor recreation facilities. Such an approach would encourage land managers to plan for a spectrum of recreational opportunities over a large regional area, rather than just within park boundaries. This would then allow the parks to better accommodate recreational activities based on intrinsic natural values, while activities requiring extensive facility construc-

¹⁵Outdoor Recreation Council of B.C., A Brief submitted to the Royal Commission on Forest Resources, (Van. B.C., O.R.C., 1975) pp. 1-20.

tion could be emphasized on the park periphery. Sound regional planning would also better facilitate the management of park ecosystems. Park boundaries are not environmental boundaries, and cannot be treated as such if managers are to be truly successful in maintaining natural biotic associations.

Intensive regional planning could well solve many of the problems presently confronting park managers and it will be the objective of this paper to analyze the full potential of this approach by (a) describing the need for a regional approach to planning, (b) developing a model to manage outdoor recreation, and (c) outlining the new role of park management under a regional planning framework. Although some examples are taken from the United States, this report attempts to describe the application of a regional planning approach to national and provincial parks in British Columbia.

CHAPTER 1What is Regional Planning?

Over the past decade, there has been much discussion regarding regional planning as it relates to areas of the national and provincial park systems. To date, actual implementation of the regional planning concept has been generally restricted to the United States, but it is becoming increasingly evident that a similar approach must be applied to the parks of Canada. Many national and provincial parks are simply not as remote and inaccessible as they once were, and our modern highway systems are bringing people and cars to our parks in overwhelming numbers. As a result, a growing number of people are becoming disillusioned with their park experience due to constant encounters with crowds and cars rather than with the natural beauty and serenity they came to enjoy.

In parks such as these, one may effectively argue that the original and coequal objective of preservation is slowly giving way to that of mass use. If this proves to be the case, it is then imperative that every attempt be made by park managers to reduce visitation, and generally, there are many viable alternatives of doing so. Among these are access limitation, area zoning,

mandatory use permits, reservation systems and the distribution of visitation. However, regional planning, a solution that recently seems to have gathered a great deal of support, may prove to be the most appropriate method of reducing visitor use pressures in parks. The intent of this approach is to focus specific kinds of visitor accommodations, facilities, and opportunities on the regional areas surrounding parks, and thus reduce the diversity of recreational demands within park boundaries. This would then better enable park managers to accommodate those activities based on the enjoyment of natural features, while those necessitating artificial structures could be encouraged outside the park boundary. Furthermore, by catering primarily to individuals seeking wilderness or semi-wilderness experiences, certain undesirable factors within parks such as human crowding, non-natural noise, unsightliness, and artificiality could, for the most part, be avoided.²²

A regional approach to planning obviously would have a beneficial effect on park environments. In other words, new as well as existing parks would create continuing opportunities for the development of specific facilities and services on lands adjacent to these

²²J.W. Sheard and D.A. Blood, "The Role of National Parks in Canada and Criteria for their Management", Canadian Field Naturalist, Vol. 87, 1973. pp. 211-224.

reserves. Hopefully, regional land managers would recognize and influence this, so that development is carried forward in a way that compliments the park and the total environment while, at the same time, taking advantage of the parks' presence. Before this kind of planning becomes a reality in British Columbia however, managers of lands adjoining parks will have to become more involved in the provision of recreational experiences. At this point in time, the diverse leisure demands of the public have not been accommodated to a great extent on non-park land. Until this changes, pressure for increased development within our parks will continue.

When discussing the concept of regional planning, one must inevitably ask, "What constitutes a region?" This is not always an easy question to answer, as the size of different park regions may vary tremendously. Some parks may be relatively self contained whereas others may be subject to influences over great distances. For the purposes of this report however, a region is defined as "an area of the earth's surface differentiated from adjoining areas by one or more features which give it a measure of unity".²¹ This definition is certainly

²¹Charles F. Schwartz, Wildland Planning Glossary, (PSW Exper. Station, U.S. Dept. of Agriculture, 1976) p. 156.

valid, but should be interpreted very broadly as there are numerous interacting factors to be considered prior to the determination of appropriate planning boundaries. Among these are topography, vegetation or habitat type, population (human and animal), land use, and the economy. These are all essential factors and the relationship between these and other elements will greatly effect the definition of a regional area.²¹ Consequently, specific regional boundaries have to be determined on a site by site basis, but regional designation, in any case, should permit a maximum number of agencies or governments to contribute resource data. Such commonality of boundaries will then hopefully aid in the establishment of a cooperative planning relationship between neighboring land and resource managers.

The regional planning concept has definite value and application to recreational land management in British Columbia. Yet it must not be advocated solely to reduce visitor use concentrations through the manipulation of park facilities and accommodations. This is a very legitimate function, but if all the advantages of regional planning are to be gained, it must be considered in an

²¹Charles F. Schwartz, Wildland Planning Glossary, (PSW Exper. Station, U.S. Dept. of Agriculture, 1976) p. 13.

even broader context as it relates to all aspects of the environment. This approach is needed simply because the boundaries of most parks are too easily ignored by natural events such as fire, flood, plant succession, watershed runoff and the movement of wildlife. Similarly, environmental repercussions within park borders are often ignored by those who dam, mine, cut, graze or otherwise develop lands adjacent to parks.¹⁰ Hence, if park managers are to adequately compensate for these factors, they can no longer afford to be confined by narrow job descriptions or patterns of accountability. Granted these kinds of constraints are not easily overcome, but, through cooperative and coordinated planning, parks' personnel can hopefully influence others to follow land use practices which will be compatible with the parks. In some areas of British Columbia, this kind of regional planning has already started to develop among neighbouring land managers. This is certainly a desirable occurrence but, if park agencies are to be truly successful in managing and maintaining natural park ecosystems, this kind of regional communication will have to occur to an even greater extent in the future.

¹⁰M.D. Kostka, "Parks - the Last Bastions of the Environment", Parks and Recreation, March, 1976, p. 33.

Chapter 2The Need for Regional Planning -
a Look at the Causal Factors.

When discussing the regional planning concept, it is important that one have an adequate understanding of the elements that have created the need for such an approach. In many of Canada's parks, two such inter-related factors seem to be of equal importance. The first of these refers to the tremendous increase in the diversity of public recreational interests and pursuits. The second deals with attempts by park personnel to manage and preserve natural ecological units. Both of these factors are essential to the regional planning discussion and are thus worthy of individual analysis.

- a. Public Recreation - In the United States visitation to national parks more than doubled in the 1960's, causing high-use densities in Grand Teton, Yosemite, Yellowstone, Great Smoky, and Shenandoah National Parks to name just a few. Similarly, visitation to central Canada's provincial parks increased 88% from 1964-1970, and overnight campground use rose 160% for

the same period.²⁴ This pattern of increasing visitation far exceeds national population growth rates for both the United States and Canada. This suggests that park visitation is not merely a result of population growth, but is influenced by factors such as an increasing standard of living.²⁰ For example, many Canadians enjoy a shortening work-week, more flexible working hours, and longer vacation periods. They also continue to afford travel despite the energy shortage,⁶ and a widespread interest in the outdoors, stimulated by most Canadians' urban way of life, seems to be directing more and more travelers to the national and provincial parks.

In British Columbia, since 1958, the average annual increase in visitation to

²⁴G.D. Taylor, Problems in Managing a Recreational Park, Weyerhauser Lecture Series, (Lakehead Univ., Ontario, April, 1971) pp. 1-9.

²⁰W. Sinclair, "Significance of Outdoor Recreation to the Economy", in Rocky Mountain - Pacific Rim Park Recreation Conference Proceedings, ed. by P.A. Dooling (Univ. of B.C., 1975) pp. 8-9.

⁶Robert F. Gift, Outdoor Recreation Trends and National Planning, in Environmental Attitudes, Ethics and their Communication, (Univ. of N.Y., Syracuse, Coll. of Environ. 1976) p. 20.

provincial parks has been approximately 10 percent.¹⁵ If this figure is coupled with a projected population growth of 70 percent in the Greater Vancouver area and 33 percent in the Victoria vicinity by 1996, we can only anticipate still further increases in the use of our parks and an even greater demand on our outdoor resources.

Aside from increased park visitation over the last twenty years, there also has been a significant change in the values, preferences and behavior of outdoor recreationists in general.⁸ This seems to be due primarily to advances in technology, cultural changes, and the rise in real income. For instance, overnight campers no longer are required to forfeit home comforts as they once did due to the availability of well-equipped aluminum campers, canopies and large recreational vehicles. These kinds of equipment improvements have greatly expanded the appeal of outdoor recreation over

¹⁵Outdoor Recreation Council of B.C., A Brief submitted to the Royal Commission on Forest Resources, (Van. B.C., O.R.C., 1975) pp. 1-20.

⁸John Hendee, "Forestry's Response to Increased Demand for Commodity and Amenity Values", Journal of Forestry, Dec. 1974, pp. 771-774.

the last two decades to a much larger and more diverse group of people. As a result, the traditional forms of outdoor recreation such as hiking, camping, hunting, and fishing have been joined by unprecedented increases in snowmobiling, downhill skiing, trailbike riding, power boating, pleasure driving, and even the more recent technologically sophisticated experiences such as hang-gliding and hot air balloons.¹⁵ Other activities such as canoeing, horseback riding, cross country skiing, birdwatching, mountaineering, rockhounding and nature interpretation are also quite popular for various reasons and require consideration as well.

The increase in the popularity of these pursuits obviously indicates an interest by the general public in a diversity of recreational activities. Consequently, regional land managers should attempt to offer a whole "gamut of games", and, depending on the impacts and requirements of different recreational experiences, some would be available within parks, while others could be catered to outside the

¹⁵Outdoor Recreation Council of B.C., A Brief submitted to the Royal Commission on Forest Resources, (Van. B.C., O.R.C., 1975) pp. 1-20.

park boundary. In British Columbia however, because of the traditional lack of involvement by regional land managers outside of parks, some observers have suggested that the entire spectrum of recreational pursuits be satisfied within national and provincial parks alone. If this were attempted, conflicts of use between individual activities would be almost unavoidable. This would not be in the best interests of our parks, or their recreational clientele.

In essence, with only four percent of the Province committed to parkland, park managers are prohibited from successfully accommodating the massive numbers, or the diversified interests, of today's outdoor recreationists. Therefore, managers should seek to develop an alternative strategy by which the national and provincial parks of Canada can achieve their intended objectives. This would involve the successful implementation of a regional planning system and a realization by all land managers that parks can no longer be "all things to all people".²⁷

²⁷C. Wren, "How to Wreck a National Park", Look Magazine, Vol. 34, 1970, pp. 77-78.

- b. Environmental Protection - The increase in park visitation has not only heightened the conflict between different recreational groups, but it has also caused significant ecological damage within many parks. Even activities such as hiking and sight-seeing, despite their non-consumptive nature, can at times conflict with the preservation objective of parks. For example, visitors to Rocky Mountain National Park in Colorado have greatly damaged fragile alpine vegetation by trampling, picking flowers, and removing rocks.⁹ The resulting soil compaction and erosion have hindered natural recovery in this delicate area, and, even if visitation were to be totally eliminated, complete recovery still would take several decades. In situations such as this, visitation must then be limited, and hopefully other regional alternatives will be available to those seeking an alpine experience.

The Black Tusk area, just north of Vancouver is another similar example of high-use densities in an alpine environment. By 1980,

⁹D.B. Houston, "Ecosystems of National Parks", Science, May, 1971. pp. 648-651.

in response to increasing use, the Provincial Parks Branch plans to build 160 additional campsites, 8 cooking shelters, and the necessary sewage, garbage, and firewood facilities.¹⁶

In support of this proposed development, it may be argued that the benefits of mass use in the Black Tusk area outweigh any human use damage short of complete obliteration. However, this trade-off decision needs to be made within the context of both situational and regional objectives. Too often, managers automatically react to rising visitation with increased facilities, forgetting about the disruptive influence this kind of development can have.

In alpine areas, for example, the needed disposal of sewage can significantly alter natural energy pathways as well as effect nitrate and phosphate cycles.⁹ The supplying of firewood in such areas will require either costly transportation or the cutting of local trees.

¹⁶Parks Branch Planning Division, Black Tusk 1980 (Victoria, Prov. Parks Branch, 1975) pp. 1-8.

⁹D.B. Houston, "Ecosystems of National Parks", Science, May, 1971. pp. 648-651.

This kind of intensive development may also have significant effects on the park's wildlife. In many areas, this is best exemplified by numerous problems with bears resulting from the inadequate removal or disposal of garbage. Bears are not a problem in the Black Tusk area, but a number of other parks in British Columbia are not as fortunate.

Even if disruption to the park environment by intensive visitor use was totally eliminated, the preservation objective of parks would still be difficult to achieve because of land management practices outside of parks. For example, few parks are large enough to be self-regulatory ecosystems; instead they are subject to the influence of activities in the surrounding region.¹² This problem is still further aggravated by straight-line boundaries which often disregard watersheds as natural management units. Consequently, "straight line reserves", like British Columbia's Strathcona and Kokanee Provincial Parks, are generally ecologically

¹²A.S. Leopold, et al, "Wildlife Management in the National Parks". unpub. report submitted to Committee on Wildlife Mgmt., Dept. of Int., Wash. D.C., 1962. pp. 1-15.

incomplete, because essential winter ranges for both ungulates and predators will usually exist outside the boundaries of the park.⁹ Regional planning and communication in such areas would then seem to be essential if park objectives are to be met.

Still another environmental component to be considered in park management is that of plant succession. Although vegetation is relatively stationary, mobile agents such as fire can be significantly important in preserving historical vegetation mosaics. In many parks, the existence of ecological communities are often dependent on cyclic or recurring burns. However, if such areas are protected from fire, plant succession will then continue towards a climax stage, and certain traditional features (such as grasslands, alpine meadows and some shrub communities) may well be lost to an invasion of trees.⁹ If this is deemed to be historically unnatural, such an occurrence would be contrary to the preservation of national and

⁹D.B. Houston, "Ecosystems of National Parks", Science, May, 1971. pp. 648-651.

⁹Ibid

provincial parks. In these areas, it would then seem logical that fire, as well as insects and disease, should be allowed to play a role in the management of specific park ecosystems. Before this can occur however, a great deal of regional planning would have to take place so as to ensure adequate protection for values, such as commercial timber, that may exist on lands adjacent to parks. This kind of planning has already taken place between Parks Canada and the Alberta Forest Service, and has resulted in the development of back country fire management plans for several Rocky Mountain national parks.

Such a program has not yet occurred in B.C.'s provincial parks, where a policy of complete suppression is still being pursued.

— — — — — — — —

Park managers have long recognized the conflict between public recreation and environmental protection and, in North America, they have traditionally attempted to solve this problem through the adoption of an area

zoning approach.¹⁷ Zoning within a park allocates specific categories of use to definite areas, as outlined in a master-plan. These zones range from intensive-use access or development zones to wilderness or nature conservancy zones. In B.C. provincial parks, nature conservancy zones are intended to preserve natural ecological communities.²⁶ To date they represent B.C.'s counterpart to the Wilderness Act (1964) of the United States.

Allocating development restrictions to specific areas, through zoning, can be an effective management tool, but in some parks its actual effect has been a reduction in the amount of parkland under the original preservation objective. For example, by zoning the boundaries of wilderness away from access roads, the establishment of development zones as well as user facilities is often encouraged.¹⁴ In 1964, the Superintendent of Yellowstone National Park stated that

¹⁷N. Richards, "Master Planning of Provincial Parks - A Developing Technique", Recreation Canada, April, 1976, pp. 55-59.

²⁶R.A. Williams, Policy Statement Regarding Nature Conservancy Areas, Report submitted to Prov. Parks Branch, Victoria, B.C. Sept. 14th, 1972.

¹⁴National Parks and Conservation Assoc., Principles for Wilderness Designation and Regional Recreation Planning, (Wash., D.C., NPCA, 1972) p. 13.

development zones allowed the construction of certain improvements (such as necessary parking areas, divided highways, and accommodation facilities) to manage increasing visitation.⁵ This illustrates how zoning sometimes can increase the amount of development within a park while decreasing the total acreage available for primitive wilderness recreation.

In essence, zoning by itself will not meet the challenge of preserving the park environment in the face of increased recreational demand. Therefore, alternative methods must be investigated, and among these, regional planning could prove to be the most appropriate. Such an approach would attempt to disperse different recreational opportunities over a much larger area, and thus reduce visitor impacts within the park itself.

To better illustrate this point, we might consider the effects of regional planning on high-use densities already occurring in some of our park wilderness areas.

In many parts of this province, the only trails that seem to be known to the general public are those found in the backcountry regions of both national and provincial parks; as expected, these trails are generally the most popular among hiking enthusiasts. However, it has

⁵L.A. Garrison, "Managing Human Use in Parks", Parks and Recreation, Jan. 1964, pp. 201-205.

recently been suggested that, through the provision of areas managed for primitive recreation outside of parks, congestion problems within certain park wilderness areas may be alleviated.²³

In support of this contention, several studies have shown that the experience sought by many wilderness users could be better provided for in areas other than wilderness. On these semi-wild, non-park lands, managers would not be subject to the same constraints as in wilderness, and could therefore enhance recreational opportunities, construct intensive high-grade trail networks, provide primitive recreation facilities, and perhaps even manipulate vegetation so as to improve scenic viewing. If properly developed and promoted, such a system would, in all probability, draw some use away from parks as well as better meet the needs of many people currently using designated wilderness areas.²³

This one example effectively illustrates how intensive regional planning can allow land managers to better meet the recreational needs of the public through the development of a variety of opportunities over a given

²³G. Stankey, R. Lucas, and D. Lime, "Crowding in Parks and Wilderness", Design and Environment, Fall, 1976, pp. 39-41.

²³Ibid

regional area. Furthermore, these opportunities could be developed, with careful planning, so as to compliment each other and thus prevent some of the conflicts that are presently so common in parks. This concept has been developed and applied over the last decade in the United States and, to date, it has proven to be a valid and successful method of reducing visitor pressures on parkland.¹⁴

¹⁴National Parks and Conservation Assoc., Principles For Wilderness Designation and Regional Recreation Planning. (Wash., D.C., NPCA, 1972) p. 13.

CHAPTER 3A System For Regional Recreation in British Columbia

The regional philosophy of park management is based on the identification and dispersion of recreation opportunities, facilities, and accommodations throughout the regions surrounding parks.¹⁴ Under such an approach, all management proposals within parks would be considered in light of similar or alternative recreational opportunities offered by adjoining park and non-park areas. Similarly, master plans for each park unit would be developed within a regional geographic framework similar to that used in the Yellowstone-Grand Teton region in the United States. Occasionally, such planning may take on an international flavor as well. The Waterton-Glacier International Peace Park and the International Peace Garden are examples where regional plans were developed in conjunction with both the U.S. and Canada.

A regional planning system is dependent on a great deal of coordination between various land managers, and, if it is to be effective, such an approach usually requires several major components, as well as a manage-

¹⁴National Parks and Conservation Assoc., Principles For Wilderness Designation and Regional Recreation Planning. (Wash., D.C., NPCA, 1972) pp. 1-5.

ment framework to coordinate planning. Both of these aspects are of extreme and equal importance, and will be discussed individually.

a. Components of System

Because regional planning deals with a diversity of public leisure demands, recreational lands will range from pure wilderness to areas intensively managed under an integrated resource use scheme. This diversity is essential to the success of a regional planning system and therefore, at least three major categories should be recognized: national and provincial parks, recreation areas, and recreational corridors.

National and Provincial Parks - If areas adjacent to parks catered to certain recreational activities, as specified under a regional planning scheme, park managers could then more easily discriminate between recreational activities that are consistent with park objectives and those that are not. By limiting recreation in parks to activities of little impact requiring only primitive facilities, park administrators could then re-assert one of the most important objectives of Canada's parks: the preserving and interpreting of natural ecosystems.

If this philosophy were implemented, a park would generally attempt to cater to activities based on natural assets such as hiking, tent camping, photography, and nature interpretation. On the other hand, activities requiring motorized vehicles as well as those requiring an extensive amount of facility construction generally would be encouraged outside the parks. However, if a particular park provides the only opportunity within a given region for such activities to occur, management may then understandably reconsider its position, provided other recreational values within the park will not be unacceptably impaired.

Regional Recreation Areas - In British Columbia, large tracts of public land surround most national and provincial parks. These lands often are managed by the B.C. Forest Service, and could be part of a comprehensive regional plan. Under such a plan, land adjacent to park boundaries could be designated as a buffer zone, in which harvesting procedures, hunting seasons, and visitor accommodations would receive special consideration. Through inter-agency planning, facilities for those recreational activities (eg. snowmobiling and trail biking) that are

potentially incompatible with natural wilderness pursuits could be built on ecologically tolerant sites or within ecologically acceptable boundaries. Skiing facilities and large central campgrounds also could be provided by private enterprise on the periphery of the park. These kinds of commercial development would have the important effect of creating employment in remote locations, but any growth or expansion of such facilities would still be governed by the criteria set forth in the regional recreation plan.²⁰

Recently, private companies holding Tree Farm Licences on Vancouver Island have taken the initiative in allowing public recreation on their lands. This not only illustrates the fact that permanent timber access roads can be compatible with some forms of recreation, but also that industry has recognized the benefits to be gained from a better public understanding of forest management.

Recreation Corridors - The development of recreational corridors, linking urban centers or following

²⁰W. Sinclair, "Significance of Outdoor Recreation to the Economy", in Rocky Mountain - Pacific Rim Park and Forest Recreation Conference Proceedings, ed. by P.A. Dooling (Univ. of B.C., 1975) p. 84.

linear features such as rivers, roads, or trails, is an important part of a system for regional recreation. In the U.S., this need was recognized years ago and led to the passage of the National Trails Systems Act and the Wild and Scenic Rivers Act in 1968. Increased recreational use of National Forests also has led the U.S.F.S. to develop a system for visual management¹, which is now applied to many scenic highways.

In B.C., at the present time, no trails outside of park boundaries have any legal protection.¹³ Similarly, despite a Parks Canada Wild River Study (1971-1973), British Columbia's scenic rivers such as the Chilcotin and the Stikine have no protection from dams or shoreline development.¹¹ In February 1975, the B.C. government did propose a recreation corridor system which was to be patterned after legislation in Washington state. Unfortunately,

¹Warren Bacon, "Mans' Visual Environment", in Rocky Mountain - Pacific Rim Park and Forest Recreation Conference Proceedings, ed. by P. Dooling (Univ. of B.C., 1975) p. 19-1.

¹³D. MacLaurin, Recreational Trail Management in B.C., report submitted to Outdoor Recreation Resource Symposium, Parksville, B.C., Feb. 15, 1975 (U.B.C.) p. 6.

¹¹G. Lee, Canadian Rivers: Values and Futures Report submitted to Outdoor Recreation Resource Symposium Parksville, B.C., Feb. 15, 1975 (U.B.C.), pp. 4-5.

this legislation has not been enacted.

Despite these shortcomings however, the future of corridor management in Canada does bring to mind many exciting possibilities. Among these are parkway potentials, as well as hiking trails, that would cross the Canadian - United States border and thus be managed on a cooperative basis. Possible extensions into Canada of the Pacific Crest and Appalachian trails have already received a great deal of attention.

On the provincial scene, a new corridor management proposal has been submitted to the Provincial Government by the Outdoor Recreation Council (see page 30) asking legislative protection for British Columbia's outstanding trails, rivers, and shorelines. At present, this proposal is being seriously considered by government officials, but the adoption of such legislation does not seem to be a realistic possibility in the immediate future. Nevertheless, at some point in time, recreational corridor management will become a reality in this province, and these lands will then hopefully be coordinated with the other major components of a regional recreation system. Once this occurs, land managers could continue to accommodate existing numbers of recrea-

tionists and yet still moderate the impact of human use on park environments.¹⁴

b. Management of the System

In November 1975, the Outdoor Recreation Council (O.R.C.) of B.C. submitted a report to the Royal Commission of Forest Resources. In this report a model was presented on the management of outdoor recreation and the coordination of public input into land-use planning. This model seems to be a possible answer to the existing need for a regional planning approach to outdoor recreation. It is not only applicable to the B.C. situation but also reflects recent trends in recreational land management in the U.S.³

The O.R.C., which initiated the proposal, is an organization developed by those public recreation groups which attended the Provincial Conference on the Recreational Use of Wildlands in April 1975.¹⁵ The council is composed of a coordinator, a project

¹⁴National Parks and Conservation Assoc., Principles For Wilderness Designation and Regional Recreation Planning. (Wash., D.C., NPCA, 1972) p. 112.

³Conservation Foundation, National Parks for the Future, (Wash., D.C., - Con. Foundation, 1972) p. 9-27.

¹⁵Outdoor Recreation Council of B.C., A Brief submitted to the Royal Commission on Forest Resources, (Van., B.C., O.R.C., 1975) pp. 1-20.

manager, and a representative from each of the twenty-four member organizations. The member organizations represent all the diverse recreational interests in our modern society, from the Sierra Club to the B.C. Motorcycle Association.

The proposed O.R.C. model is based on the seven resource management regions instituted by the Environmental Land Use Committee (E.L.U.C.) in January 1975. Within these regions, a resource management committee, composed of various land and resource managers, would be appointed, and their job would be to ensure that resource agencies, such as the Fish and Wildlife Branch, the B.C. Forest Service and the Parks Branch, would coordinate their efforts to produce an integrated resource plan for each region. The implementation of this model would also require the establishment of an Outdoor Recreation Branch or Division. Represented in all regions, this agency would be responsible primarily for the coordination of recreation policies on non-park land.

Still another aspect of this proposal deals with the need for greater public input into recreational planning, and, in an attempt to achieve this, the model advocates the establishment of regional

Outdoor Recreation Advisory Committees. Once designated, these committees would elect a Regional Coordinator to participate in planning at the regional level. The O.R.C. itself would remain a provincial representative of the regional committees, coordinating public participation throughout the Province and lobbying for changes in legislation.

Presently, the O.R.C. represents a large segment of outdoor recreationists and has the potential of becoming a vehicle for public input into the land-use decision making process. If this model were adopted, the council's potential would be further enhanced, and a framework for public involvement in the management of B.C.'s public lands finally would become established.

The importance of this model to British Columbia needs to be emphasized. Since 1930, all provinces in Canada have had jurisdiction over the management of their lands and natural resources.⁴ As a result of this jurisdiction, the existence of most B.C. provincial parks is based on Orders-in-Council, while national parks are protected as amendments to

⁴H. Eidsvik and G. Lee, National Parks - Resource Relationships and Policy Implications for Management, Weyerhaeuser Lecture Series (Lakehead Univ., 1971) p. 36.

the National Park Act.⁴ Since changes to provincial parks often do not require parliamentary consent, public participation in the O.R.C. model acts as a long needed democratic safeguard. Furthermore, regional land use planning, under such a scheme, would occur in conjunction with public participation, and this would effectively foster community involvement as well as a sense of responsibility among resource managers.¹⁸

To date, the O.R.C. model has not been fully instituted in British Columbia. The Outdoor Recreation Division has recently been established, but as yet, it has not received adequate operating funds. The establishment of effective resource management committees has also not completely materialized in all parts of the Province. Despite these events however, there has been great progress in the area of public input, much to the credit of the O.R.C. Furthermore, regional communication between the Provincial Parks Branch and the B.C. Forest Service

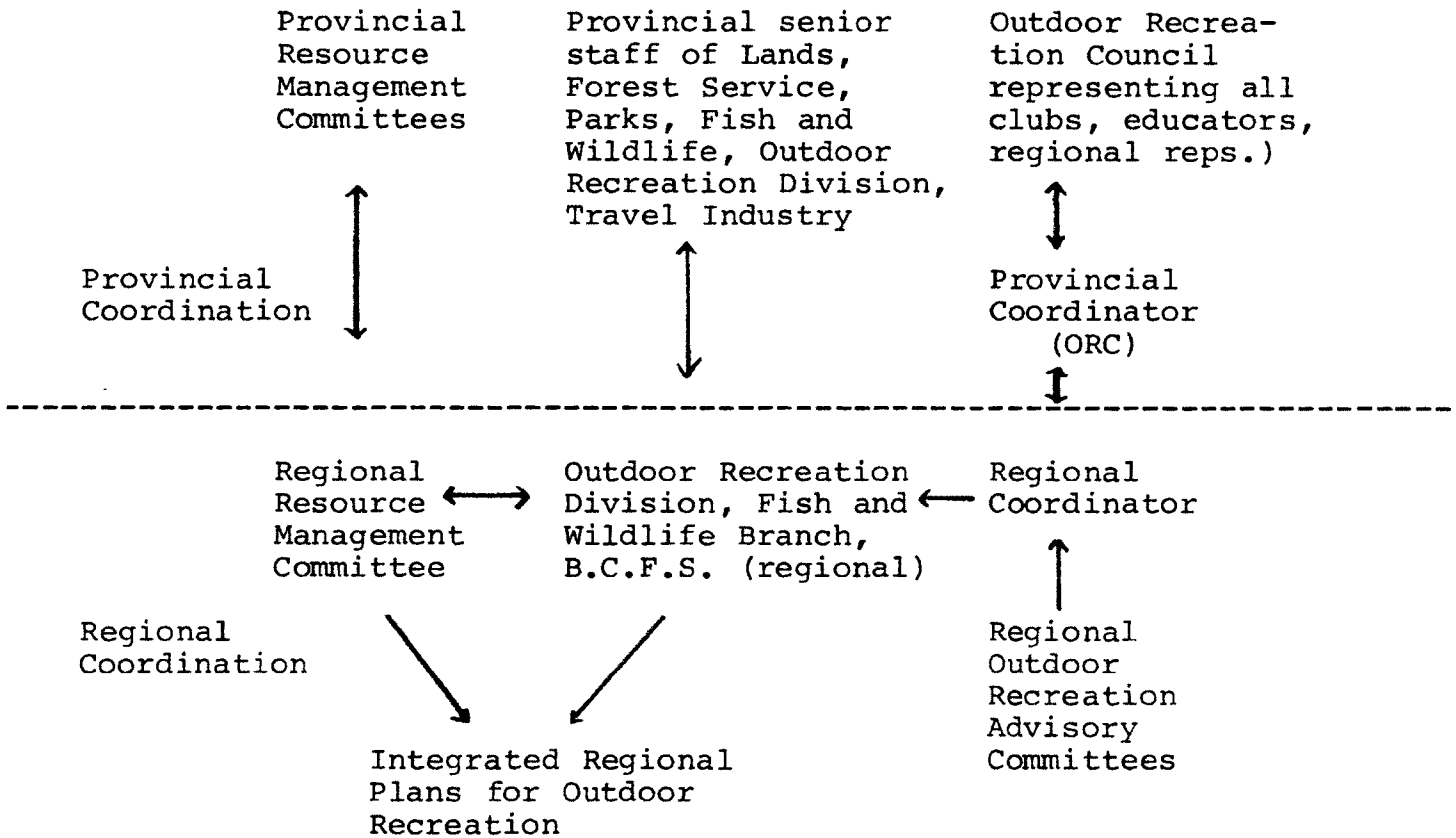
⁴H. Eidsvik and G. Lee, National Parks - Resource Relationships and Policy Implications for Management, Weyerhaeuser Lecture Series (Lakehead Univ., 1971) p. 40.

¹⁸T. Richards, "Clearing Obstacles and Getting Results at the Local Level", No Deposit - No Return, ed. by H. Johnson (Reading, Mass: Addison-Wesley, 1970) pp. 193-197.

has steadily improved and the Forest Service Recreation Program is growing rapidly. These occurrences must be viewed as desirable and will certainly aid in the future development of regional park plans.

The O.R.C. Model

Integrated regional planning for outdoor recreation involving organized public input



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¹⁵Outdoor Recreation Council of B.C., A Brief submitted to the Royal Commission on Forest Resources, (Van. B.C., O.R.C.) 1975, pp. 1-20.

CHAPTER 4The Role of Park Management
in Regional Recreation Planning

If a regional approach to providing outdoor recreation is instituted, parks in B.C. will have to reassess their present policies, as well as make the necessary changes in their management of visitors and ecosystems. This, in many cases, would involve some rather dramatic changes in the way parks are managed. Consequently, the role of parks within a regional plan should be carefully examined as well as those aspects of park management most effected by the implementation of such a system.

- a. Policy - Within a regional planning framework, parks can best meet the needs of our society by "re-asserting their traditional role; the preservation and interpretation of natural landscapes and ecosystems".³

Under such a program, recreational use in all parks would be restricted to activities that are of low environmental impact. In line with this preservation objective, zoning within parks

³Conservation Foundation, National Parks for the Future, (Wash., D.C. - Con. Foundation, 1972) p. 9-27.

would expand the area classed as Nature Conservancies to include the majority of parkland. This would become more feasible with time as the need for specific recreational facilities become better accommodated outside the park boundary. Similarly, there is a need to upgrade existing Class B* provincial parks, such as Tweedsmuir, to exclude resource utilization, and to shift consumptive recreation to adjoining public forestland. Much to its credit, the Parks Branch is already starting to move in this direction.

Attempts to expand the existing provincial park system also should continue, with an emphasis on acquiring representatives of all major landscape types. Presently, the Cariboo parklands and the Peace River prairies are not represented by a major park reserve.

Finally, as urban centers grow, there is a greater need for park acquisitions within short travelling distance of these areas. Park acquisitions in these regions would not have to

* Class B parks traditionally have allowed other types of resource use to occur provided recreational values are not impaired. This classification will, in all probability, be phased out in the very near future.

be limited to untouched areas. For example, outstanding opportunities, such as the Chilliwack River and Cowichan Lake areas, often exist within short distances of metropolitan areas such as Vancouver, and could be managed as "restoration reserves".³

The second aspect of park policy deals with the interpretation of natural ecosystems. This goal hopefully will be met not only through expanded naturalist programs, but through the park operation as well, which could easily act as a showcase illustrating man's proper stewardship of the natural environment.³ These kinds of programs, which can be an essential aspect of successful visitor management, should reach out to urban centers (and particularly to public schools), emphasizing ecological relationships as they affect man and his environment. Furthermore, interpretation need not be limited to parks alone, as there is generally great potential for interpretive programs on adjoining forest land.

³Conservation Foundation, National Parks for the Future, (Wash., D.C. - Con. Foundation, 1972) p. 9-27.

³Ibid

Whenever possible, the operation aspect of parks should exemplify the environmental ethic by recycling garbage, properly treating sewage, developing mass transit, using propane powered vehicles and by using alternate sources of energy.

In short, through preservation and interpretation, parks should become advocates for environmental reform.

- b. Visitor Management - Within our national and provincial parks, there is an important need for a visitor management program that adequately protects the park environment as well as the quality of the visitors' experience.¹⁹ This program should be based on sociological surveys and ecosystem research for each particular park region. In British Columbia's national and provincial parks, the development of such a visitor management system should attempt to reduce or limit the impact and encroachment of overnight accommodations, constructed recrea-

¹⁹R. Rowntree, "Managing Visitors in Order to Protect Park Values", in National Parks for the Future, ed. by Conservation Foundation (Wash., D.C.: Con. Foun. 1972) pp. 163-169.

tional facilities and transportation systems. This is particularly important when attempting to manipulate visitation, because the design and development of these features can greatly determine the type and number of visitors that will be attracted to the park.¹⁹

Concerning overnight accommodations, the basic policy should be determined by, "What is the minimum level of facilities necessary within the park?"³ Facilities for low-impact camping and hiking could remain within the park, but their development should be restricted. Resort hotels and large developed campgrounds requiring excessive construction should be phased out of parks and located elsewhere within the region. These could be provided by private enterprise, but should remain subject to the planning and quality control of government agencies.²⁵

¹⁹R. Rowntree, "Managing Visitors in Order to Protect Park Values", in National Parks for the Future, ed. by Conservation Foundation (Wash., D.C.: Con. Foun., 1972) pp.163-169.

³Conservation Foundation, National Parks for the Future, (Wash., D.C. - Con. Foundation, 1972) pp. 9-27.

²⁵N. Weiters, "The Role of National Park Concessionaires", in National Parks for the Future, ed. by Conservation Foundation (Wash., D.C.: Con. Foun., 1972) pp. 157-161.

Within the park, other visitor facilities generally associated with accommodations should be restricted to those that are compatible with the preservation objective. Because many of our parks lie in generally unsettled country, large suitable areas outside parks often are available for intensive recreational facility development. Established communities in these areas would prosper greatly from the development of sizable resorts capable of serving many of the visitors presently crowding into the more popular areas of our parks. These resorts could then include all the facilities and luxuries visitors may request such as swimming pools, golf courses, ski hills, cocktail lounges, and pool halls.

There has been some consideration given to this kind of planning by Parks Canada over the last decade, and this has resulted in the development of several resorts outside national parks such as Kootenay and Pacific Rim. However, many of the large resorts in our national parks have become attractions in themselves, and thus will probably remain throughout the foreseeable future. Attempts to phase out certain facilities

has also been initiated in some areas by the provincial Parks Branch. These efforts have led to the cancellation of a proposed White Crown Ridge ski area on Vancouver Island and the removal of a gasoline station from Manning Park.

If most accommodations and facilities were successfully relocated outside park boundaries, a public transportation system might then be considered in some parks as a viable alternative to private automobiles. Such an approach would help to reduce congestion at selected attractions, and would not always involve a complex operation. Two different but complementary types of coach systems could be used: one from the outlying resorts, involving relatively large vehicles, and the other within the main visitation areas, using mini-coaches on short circuits.¹⁴ These mini-coaches could run at frequent intervals, with many stops to give visitors access to various points of dispersion. This type of system was instituted by the National Park Service in the U.S. at both

¹⁴National Parks and Conservation Assoc., Principle for Wilderness Designation and Regional Recreation Planning, (Wash., D.C., NPCA, 1972) p. 12.

Yosemite and Mt. Mckinley National Parks, and it has won quick public acceptance.⁷ Although this system usually is practical only in areas of high visitation, a similar public transit system has been successfully developed in Canada at Point Pelee National Park,⁴ and the feasibility of such an operation in Kluane National Park is currently being assessed.

Despite the acceptance of these accommodation and transportation guidelines, user concentrations in all probability will continue to cause excessive visitation at some park attractions. This type of congestion however can be avoided through information and reservation systems.¹⁹ The public simply needs to be able to distinguish between the type of experience one would expect from a visit to a park, as opposed to that found in a regional recreation

⁷G. Hartzog, Jr. "Clearing the Roads - and the Air - in Yosemite Valley", National Parks and Conservation, Aug. 1972, pp. 14-17.

⁴H. Eidsvik and G. Lee, National Parks - Resource Relationships and Policy Implications for Management, Weyerhaeuser Lecture Series (Lakehead Univ., 1971) p. 42.

¹⁹R. Rowntree, "Managing Visitors in Order to Protect Park Values", in National Parks for the Future, ed. by Conservation Foundation (Wash., D.C.: Con. Foun. 1972) pp. 163-169.

area. This information could be presented through urban information centers, a published provincial guide to outdoor recreation, and public media.¹⁹ Information centers could also be established along major access routes, to advise visitors on regional accommodations and facilities.

In conjunction with this information system, a reservation system might also be needed to control campground facilities and overnight backcountry use.¹⁹ Not only would a reservation system regulate use, but it would also provide information for planning and research as well as increased contact with visitors. This would result in a more informed user who will derive greater satisfaction from his visit to a park. Public parks thereby will provide a better social service.

- c. Ecosystem Management - Because wildlife habitats are not fixed or stable entities, parks should

¹⁹R. Rowntree, "Managing Visitors in Order to Protect Park Values", in National Parks for the Future, ed. by Conservation Foundation (Wash., D.C.: Con. Foun. 1972) pp. 163-169.

¹⁹Ibid

attempt to broaden their concept of wildlife preservation to provide for the deliberate management of plant and animal communities.¹² In line with this approach, the primary goal of ecosystem management should be "to maintain, or recreate, the environment that existed at the time of European contact. This active manipulation may at times require the use of the tractor, chainsaw, rifle, or flame-thrower, but such management actions should occur only if they can be justified on the basis of scientific research".¹² Once this research has been conducted, the management prescription for each park and the surrounding region can then be designed to meet its own unique characteristics.

In many of Canada's parks, the need for ecosystem management is best demonstrated by the dramatic increases that have so frequently occurred in certain ungulate populations. Unfortunately, this has often resulted in significant and long lasting damage to park habitat.

¹²A.S. Leopold, et al, "Wildlife Management in the National Parks". unpub. report submitted to Committee on Wildlife Mgmt., Dept. of Int., Wash., D.C., 1962, pp. 1-15.

¹²Ibid

When this happens, every attempt should be made by park managers to "maintain or reduce ungulate populations to the level that the range will carry in good health and without impairment to the soil, the vegetation, or to the habitats of other animals."¹² This is usually accomplished through the harvesting of excess animals once herds have migrated outside park boundaries. Seasons are usually arranged by the Fish and Wildlife Branch, in conjunction with the migration, to ensure an adequate kill.

Ironically, this type of hunting, and the activity associated with it, may on occasion, also tends to eliminate migration into the surrounding region. This can intensify overpopulation on winter ranges within parks.² When this occurs, excess ungulates should be shot by park personnel if trapping and transplanting programs prove infeasible.¹²

¹²A.S. Leopold, et al, "Wildlife Management in the National Parks". unpub. report submitted to Committee on Wildlife Mgmt., Dept. of Int., Wash., D.C., 1962, pp. 1-15.

²G.F. Cole, Elk and the Yellowstone Ecosystem, Report to Office of Natural Science Studies, N.P.S., Yellowstone National Park, Aug. 1969, p. 6.

¹²Ibid

Occasionally, public hunting within parks may also be a valid means of reducing ungulate numbers, but only if harvests are carefully monitored and regulated so as to achieve the desired results. This controlled removal has the advantage of selectively culling the population with a minimum of disturbance to the survivors.

It would be preferable to remove excess ungulates in parks through natural predation. However, despite recent protection in national parks, many populations of wolves, and cougars are kept below optimum levels by predator control programs applied outside park boundaries.¹² Again there is a need for the Fish and Wildlife Branch to give special considerations to areas within the park region.

The objectives of ecosystem management should also include the adequate preservation of endangered animals like the grizzly. Grizzlies at one time were common throughout B.C., but now are seldom seen in most of the Province's

¹²A.S. Leopold, et al, "Wildlife Management in the National Parks" unpub. report submitted to Committee on Wildlife Mgmt., Dept. of Int., Wash. D.C., 1962. pp. 1-15.

southern parks. Therefore, an attempt should be made by all regional land managers to protect these animals. The grizzly, however, is an unpredictable creature, and attempts should also be made to minimize the number of ugly bear-people "incidents" that have occurred in North America over the last decade. This would require a great deal of regional cooperation and some of the management precautions to be taken include proper garbage disposal, both in and out of parks, as well as the removal of campgrounds from grizzly habitat. In addition, the development of visitor education programs throughout the region would enhance the public's appreciation of this beautiful animal as well as illustrate methods of proper behavior in bear country for both hikers and campers.

Ecological management in parks is extremely complex and often requires active manipulation of animal populations. Similarly, wildlife habitats must occasionally be altered or intensively managed by man, in the absence of natural forces, if they are to remain in their traditional state. This would require a great deal of regional communication, because habitats

usually transcend park boundaries and yet, the total area of any one park that may be managed or manipulated intensively is very small.¹² To begin with, critical areas which determine animal abundance represent but a fraction of their total range. Secondly, manipulation of vegetation is often exorbitantly expensive. However, this kind of management is a necessity in many parks simply because protection alone is not enough to preserve most natural environments.

¹²A.S. Leopold, et al, "Wildlife Management in the National Parks" unpub. report submitted to Committee on Wildlife Mgmt., Dept. of Int., Wash D.C., 1962. pp. 1-15.

CHAPTER 5CONCLUSION

This paper has attempted to show how a regional approach to outdoor recreation planning will improve the ability of parks to preserve natural environments. As our population and standard of living continue to increase, the diverse demands for outdoor recreation facilities simply cannot be met within parks alone. Parks cannot be all things to all people. Instead, they should be redefined as one component within a regional recreation plan.

A very essential part of regional planning is the development of an extensive public information system in which recreationists seeking a largely facility-dependant experience, or a form of recreation with a high environmental impact, would be attracted to facilities outside of parks. The resulting reduction in the number and type of visitors would then allow parks to reemphasize their original objective of preserving and interpreting natural environments.

Similarly, park managers must approach ecosystem management with a broad regional philosophy as well. Due to factors such as artificial boundaries, wildlife movements, and current forest management practices, park

officials can no longer ignore other regional government agencies in the coordination of their programs. Before this can occur, however, the development of a government framework ensuring coordinated resource planning on adjacent forestlands is required. Since land management is a provincial jurisdiction, the Government in Victoria will have to take the initiative in providing adequate funds for proper land-use planning. At the minimum, an effective resource management committee would be required in each region to coordinate the appropriate resource agencies, including a new Outdoor Recreation Branch or Division.

In summary, I am convinced that regional park planning will allow us "to have our parks and recreation too, and in so doing, make our parks more enjoyable and more meaningful to more, not fewer, people".¹⁴ The solution lies simply in the dispersion of recreational experiences and facilities throughout the regions surrounding our parks. This is a philosophy that Canada's provincial and national parks must adopt if their preservation objective is to be met.

¹⁴National Parks and Conservation Assoc., Principles for Wilderness Designation and Regional Recreation Planning (Wash., D.C., NPCA, 1972) pp. 1-5.

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