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THE EFFECTS ON LAND USE OF FEDERAL PROGRAMS IN THE WINDERMERE VALLEY

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THE EFFECTS ON LAND USE OF FEDERAL PROGRAMS IN THE WINDERMERE VALLEY

J.D. McCuaig & E.W. Manning

September 1980

Lands Directorate Environment Canada

Working Paper No. 8

Disponible en français sous le titre: Les effets des programmes fédéraux sur l'utilisation des terres dans la vallée de Windermere

ABSTRACT

In the late summer of 1979, the Windermere Valley was selected for a pilot study that would identify the impact of federal programs on land use in a specific region. The extent of federal influence on land use in this valley was greater than had been expected and ranged from the ubiquitous post offices and police stations through to major financial and planning assistance under a variety of federal/provincial agreements.

The Federal Government has an effect on how land is used through its own land ownership and use, the provision of service facilities, basic funding programs, coordinated development funding, and its role in planning and coordination. The report deals with these areas of influence in terms of the following land-using sectors: services for urban areas and industry, agriculture, forestry, tourism and recreation, and wildlife preservation.

The federal departments that have the greatest impact on land use in the Windermere Valley are Parks Canada, the Department of Regional and Economic Expansion, and Canada Mortgage and Housing Corporation. There are other federal departments and agencies that have a minor influence in the region. The conclusion of the report is that the Federal Government plays a significant role in determining how land is used in the Windermere Valley.

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RÉSUMÉ

A la fin de l'été 1979, la vallée Windermere fut choisie comme projet pilote pour étudier l'effet des programmes fédéraux sur l'utilisation des terres dans une région donnée. L'influence fédérale sur l'utilisation des terres dans cette vallée avait dépassé toute prévision. Elle comprenait d'innombrables bureaux de poste et commissariats de police ainsi qu'une aide financière et de planification très importante dans le cadre d'accords fédéraux-provinciaux.

Le gouvernement fédéral a un droit de regard sur l'utilisation des terres grâce à sa propre propriété foncière et à l'usage qu'il en fait, à son équipement qui assure certains services, à ses programmes de subvention fondamentaux, à la coordination de ses subventions pour le développement ainsi qu'à son rôle au niveau de la planification et de la coordination. Le présent rapport aborde des secteurs d'utilisation suivants: services pour les régions urbaines et l'industrie, agriculture, foresterie, tourisme et récréation, et préservation de la faune.

Parmi les ministères fédéraux qui ont le plus d'impact sur l'utilisation des terres dans la vallée Windermere sont Parcs Canada, le ministère de l'Expansion économique régionale et la Société canadienne d'hypothèque et de logement. D'autres agences et ministères fédéraux exercent une influence limitée sur la région. Le rapport arrive à la conclusion que le gouvernement fédéral joue un rôle déterminant dans la façon dont les terres sont utilisées dans la vallée Windermere.

ACKNOWLEDGEMENTS

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1. INTRODUCTION

There are 14 Federal Government agencies producing specific land-use effects in the Windermere Valley, British Columbia. This paper identifies the individual programs and details the effects on land use of each.

The Windermere Valley (see Map 1) consists of the area from Spillimacheen to Skookumchuk along British Columbia Highway 93 and 95, just west of the Rocky Mountain Range. The population centres in the Windermere Valley are Invermere, Windermere, Radium, Canal Flats, Edgewater, and the resort community of Fairmont Hot Springs. Within this valley, the Federal Government carries out programs influencing many aspects of economic life, recreation, and services.

This study of the impact on land use of federal programs is organized by land-using sector. The first section, titled "Services for Urban Areas and Industry," covers activities that are either taking place within urban centres or are aimed primarily at urban centres. The second section deals with agriculture and covers farm credit, DREE subsidiary agreements for agriculture, and the Veterans Land Act activities. The third section focuses on forestry, discussing forestry sub-agreements, sawmills, and manpower and immigration programs that affect the industry. The fourth section analyzes tourism and recreation and the facilities provided by the Federal Government for these, including special subsidiary agreements from DREE that are concerned with tourism development. The fifth section deals with wildlife preservation, and, in this context,

discusses the proposed Kootenay River diversion. The final section assesses planning considerations and potential federal actions. Following these chapters on the various economic sectors there is a brief summary of the significance of federal land-use effects in the Windermere Valley.

2. SERVICES FOR URBAN AREAS AND INDUSTRY

2.1 Services

The Federal Government provides several basic services throughout the nation. In the Windermere Valley there are two RCMP detachments--one in Invermere and one at Radium Junction. In addition, the RCMP owns radio facilities located on Brisco Mountain. There are three Post Offices in the valley occupying federally-owned land in Invermere, Radium Junction, and Canal Flats. There are other Post Offices in the area, but they are located in stores or other facilities and are not on Crown land. A CBC-TV transmitter (CBUBT) is located at Spillimacheen. As service programs of the Federal Government, these properties do not have a major effect on land use in the Windermere Valley, though their location corresponds with and reinforces existing population concentrations.

2.2 <u>Canada Mortgage and Housing</u> <u>Corporation</u>

More significant than the basic services are the wide range of programs offered by the Canada Mortgage and Housing Corporation. CMHC, often in cooperation with provincial governments, provides funding for housing and other forms of urban development.

2.3 Community Services Program

The programs of CMHC have been changed recently, and three of the past programs -- the Neighbourhood Improvement Program, the Municipal Incentive Grant Program, and the Municipal Infrastructure Program--have been merged under the new Community Services Program. This new program is a joint federal/provincial venture that offers lump-sum federal financial aid to municipalities. The objective of the program is to provide increased flexibility to provinces and municipalities using federal funds, so that federal assistance responds better to local needs and conditions and is more equitably available. Among the eligible community services are the planning and installation of sewage-treatment plants and trunk lines and the installation of water-supply facilities and storm sewers. Social and cultural facilities, including day-care centres, community centres, libraries, recreational facilities, senior-citizen centres, ice rinks, parks, etc., are also eligible.

In the Windermere Valley, the program has primarily been involved in the installation of sewage systems and treatment facilities in Invermere, Edgewater, and Radium. Canal Flats and Windermere are eligible for the program and are slated for sewage projects in the near future.

The Edgewater sewage system is a new system involving an aerobic lagoon and outfall that are designed for the existing population and for infill housing. The

service consists of approximately 4,240 meters of 8-inch pipe, 200 meters of 6-inch force main, 120 meters of 4-inch force main, and two lift stations. The federal contribution was a 25% forgiveable loan of \$345,000 which represented two-thirds of the total cost of the system.

The new Invermere system consists of primary and secondary aeration lagoons, costing \$990,000 of which two-thirds was again the federal share. Invermere was eligible for a High-Cost Grant that is calculated on a ratio of dollars-to-population and allows more than 25% of the loan to be forgiven. This sewage system was designed for existing population and infill.

The sewage project in Radium is a secondary system with a clarifier and an oxidation ditch and extends facilities already in existence. The new part of the system has a capacity for 3,000 persons and was designed for the existing townsite, infill, and tourist facilities. The Kootenay National Park facilities near Radium are also part of the system. The two-thirds federal share of the cost was \$450,000, with 25% forgiveable.

None of the systems described above incorporate a design for future expansion.

In addition to the sewage-treatment facilities under the Community Services Program, a 24-unit senior citizens home has also been built in Invermere. At present, the home is full and has a waiting list.

2.4 <u>Residential Rehabilitation Assistance</u> <u>Program</u>

The Residential Rehabilitation Assistance

Program (RRAP) provides federal funds to assist in the improvement and repair of substandard dwellings. The use made of this program in the Windermere Valley to date has been concentrated in the town of Edgewater where connection to the sewer system was recently provided with CMHC assistance. Some 25 units in Edgewater have been granted a total of \$90,000 for improvement under RRAP. The entire Windermere Valley is eligible for RRAP, and there is now greater public awareness of its existence because of the Edgewater project, so much more use of the program is anticipated. RRAP directly affects the standard of housing and, therefore, the value of housing and land that have taken advantage of the program. Rehabilitation assistance, the CMHC sewage program, and National Housing Act loans (see below) could all encourage the concentration of future development within planned and serviced areas.

2.5 Rural and Remote Housing Program

The main objective of the Rural and Native Housing Program, better known in British Columbia as the Rural and Remote Housing Program (RRHP), is to provide better housing for families in rural Canada at prices and monthly payments they can afford. In the Windermere Valley, CMHC has, through the Rural and Remote Housing Program, constructed ten single-family units, ten semi-detached units, a 19-unit apartment building in Invermere, and a 16-unit apartment building in Fairmont Hot Springs. The apartment units are renting well, but there have been problems with single-family units, especially with the semi-detached units. The problems arise primarily through the criteria applied to ownership and

through the Graduated Payment Mortgages (GPM) for the home-ownership program (replacing the Assisted Home Ownership Program). GPM has the effect of making housing affordable to people who otherwise might not be able to afford housing, but at the end of the graduated payment, many families find they cannot afford to continue with the mortgage and default. This has been the case in some units in Invermere. Because the total housing price must be under \$46,000 and because of high costs for serviced land in these areas, the program has failed to get started in Edgewater and Radium. Aside from the actual land used, the RRHP program affects land use by influencing the type and availability of housing that is built. Consequently, the principle land-use effect of the program is on the land and housing markets of the towns involved.

2.6 National Housing Act Loans

Another of the CMHC programs operating in the Windermere Valley is the Loans for Home Ownership under the National Housing Act.

Because of the criteria for these loans, only the incorporated municipalities (Invermere, Radium and Edgewater) and an area called the Fairmont Septic Designated Area near Fairmont Hot Springs are eligible for ensured NHA loans. This program provides financial incentives to build housing in the municipalities and designated areas, thereby directing development.

2.7 One Industry Guarantees (NHA)

As an adjunct to the NHA-insured loans, there is a One Industry Guarantee Program in effect in the town of Canal Flats. The mill in Canal Flats guarantees loans under NHA

conditions for its employees, so if any loan is in default, the industry rather than CMHC provides the insurance. This enables employees of the mill to have access to lower-interest mortgages, with a greater income-to-mortgage payment and less initial equity required at the outset. To date, some 25 to 30 houses have been financed under this One Industry Guarantee.

2.8 Effect of CMHC

The overall effect on land use of CMHC is associated with the availability of housing and rental units and the incentive for housing development created by the extension and provision of sewage services. There is also a stimulus to upgrade housing through loans and grants. CMHC exercises its primary influence through the provision of money; the conditions attached to the funding and the location in which the money is placed clearly affect how land is used in the Windermere Valley. There are many potential effects from CMHC programs. especially if the sewage-treatment programs were to be extended to other areas of the valley.

2.9 Veterans Land Act (VLA)

The <u>Veterans Land Act</u> (VLA) has been in place since 1944, although new activity was terminated in 1974. The initial purpose of the act was to settle veterans on farms. In later years, the purpose was altered to encompass settling of veterans in all forms of housing. The program provides mortgage loans and technical assistance in starting farms. In the Windermere Valley, VLA holdings consist of three full-time farms and 21 small holdings. The farms will be

dealt with in the section on agriculture below. The small holdings, ranging in size from 1.2 hectares through to 6 hectares, amount to a total of 26 hectares located in or near most of the major communities in the valley (see Map 1).

By making money for investment in properties available to veterans at preferential rates, the VLA small-holdings program has an effect on land use. The VLA properties are above average in size for urban areas, therefore affecting the subdivision of property in these areas. In the case of those properties located outside the municipalities, the land is being fragmented. Most of the properties serve as primary residences for the veterans.

2.10 Federal Staff Housing (Parks)

There are two Kootenay National Park Staff Houses in the town of Invermere providing residences for Park employees. These are fully integrated into the residential pattern of the town.

2.11 Industrial Development

The Department of Regional Economic Expansion (DREE) of the Federal Government is financially involved in the development of several land-using sectors in the Windermere Valley. All DREE programs take place with the direction of a General Development Agreement, signed in 1974 between the governments of Canada and British Columbia. Under this General Development Agreement several subsidiary agreements have been signed, among which is the Industrial Development Subsidiary Agreement (IDSA). The sub-agreement is designed to encourage

industrial development in designated areas through the coordination of existing programs and the undertaking of additional new projects. The overall objectives are to encourage greater sectoral and spatial diversification of economic activity, improve opportunities for productive employment, and create a more balanced level of industrial development among the different areas of British Columbia. There has not been a great deal of activity in the Windermere Valley through the IDSA, nor has there been a significant effect on land use. However, DREE has participated in the funding of a bakery, a delicatessen, and a holding company in Invermere, and under the research aspect of the IDSA, an East Kootenay Profile has been financed.

2.12 Air Transport

The East Kootenay District Airport is on the benchlands on the east side of Lake Windermere near the town of Invermere (see Map 1). This airport occupies approximately 650 hectares, some of which is part of the Shuswap Indian Reserve, and it is a focal point of private air transport for the northern valley, since the nearest large commercial airport is at Cranbrook, 120 kilometres to the south. At present, there is no scheduled air traffic, but if tourism development increases, so, too, will the traffic at the airport. The airport's primary effect on land use is in the land area occupied, though with many Calgary residents using the airport for light plane access to recreational properties in the valley, its function as a focal point of activity is becoming more significant.

3. AGRICULTURE

The agricultural sector in the Windermere Valley includes ranching, the attendant rangelands, irrigated forage crops, and some potato farming. The latter two activities take place primarily in the centre bottomlands and benchlands of the valley, while the rangeland is concentrated on the slopes and in the tributary valleys. The major problems for agriculture in the area are the lack of water and suitabe rangeland and the conflicting demands of agriculture and urban growth, recreational development, and rural residential development. Associated with the residential and recreational pressures on agricultural land is a substantial increase in the price and value of land, making it difficult for farmers and ranchers to expand their operations in order to remain viable. Rangeland, especially, is too expensive, when and if it is available.

Besides the nationwide programs of the federal Department of Agriculture relating to farm development and research, there are three federal programs producing specific effects on the agricultural sector in the Windermere Valley. These are the Farm Credit Corporation (FCC), the <u>Veterans Land Act</u> (VLA), and the Agricultural and Rural Development Subsidiary Agreement (ARDSA) of the Department of Regional Economic Expansion.

3.1 Farm Credit

The Farm Credit Corporation was established to help Canadian farmers and those wishing to enter into farming purchase, develop, and

COLUMBIA-WINDERMERE VALLEY FEDERAL GOVERNMENT PROGRAMS ● CBC-TV LEGEND **KOOTENAY** TRANSMITTER PARK NATIONAL PARK N **NWA (NATIONAL WILDLIFE AREA) BRISCO** A DREE SUPPORTED INDIAN RESERVE RCMP SAWMILL COORDINATED RESOURCE MANAGEMENT UNIT (DREE SPONSORED) VLA, DREE OR OTHER FEDERAL FINANCIAL INVOLVEMENT **EDGEWATER** CMHC SEWAGE RETICULATION AND TREATMENT FEDERAL LAND (PURPOSE SPECIFIED) CMHC IMPROVEMENTS FEDERAL FINANCING (DREE, VLA, CMHC) * * MARSH **▲ STEAMBOAT MOUNTAIN** RADIUM **URBAN** A DREE (TIDSA) SEWAGE COORDINATED RANGE MANAGEMENT (DREE) A VLA KOOTENAY POST OFFICE **▲ CMHC WATER SYSTEM** RCMP POST NATIONAL PARK RADIUM HOT SPRINGS (SINCLAIR CANYON) Horsethier WILMER MARSH NWA SHUSWAP SCALE INDIAN RESERVE KILOMETRES WILMER-▲ TOBY-FORSTER **INVERMERE** 6 KOOTENAE HOUSE: COORDINATED RANGE EAST KOOTENAY VLA AAAAAAAAAAA NATIONAL HISTORIC SITE MANAGEMENT (DREE) PARKS - HOUSING ATHALMER WINDERMERE POST OFFICE ▲ L.E.A.P. SUPPORTED LANDS DIRECTORATE, ENVIRONMENT CANADA, 1979 INVERMERE FOREST INDUSTRY VLA A A A A RCMP POST CMHC SEWAGE RETICULATION AND TREATMENT ▲ VLA-SMALL CRAFT CMHC - SINGLE UNIT AAAAAAAA HARBOUR · SEMI-DETACHED AAAAAAAA PANORAMA SKI DEVELOPMENT COLUMBIA ▲ POTENTIALLY ELIGIBLE FOR **INDIAN RESERVE #3** - APARTMENT A (19 UNITS) TIDSA (DREE) ASSISTANCE MELI-SKI MARKETING (DREE) - SENIOR CITIZENS A (24 UNITS) DREE - SMALL INDUSTRY PROGRAM GENERAL EAST KOOTENAY BAKERY A RANGELAND ASSISTANCE (DREE) ▲ GENERAL EAST KOOTENAY - MEAT MARKET RANGELAND ASSISTANCE (DREE) - HOLDING COMPANY **FAIRMONT HOT SPRINGS** A CMHC HOUSING (16 UNIT APARTMENT) ▲ DREE (TIDSA)/CMHC SEWAGE A VLA SPRUCE GROVE CAMPGROUND DREE (TIDSA) Dutch ARDA ASSISTANCE TO PURCHASE WILDLIFE AND RECREATIONAL RESERVE A DUTCH-FINDLAY CANAL FLATS POST OFFICE CMHC ONE INDUSTRY GUARANTEE (NHA) GENERAL REGIONAL PROGRAMS/IMPACTS SMALL CRAFT **▲ DREE TOURISM DEVELOPMENT STUDY** ▲ SKOOKUMCHUK-FINDLAY A FARM CREDIT (8 FARMS, 2118 HA) RANGE UNIT (DREE) **▲ TRANSPORT · NAVIGABLE WATERS CONTROLS** PROVINCE-WIDE SKI MARKET ANALYSIS (DREE) WITH ONE FOCUS ON PANORAMA ▲ GENERAL FOREST INDUSTRY ASSISTANCE · REFORESTATION - JUVENILE SPACING · FIRE PROTECTION · RESOURCE MANAGEMENT

maintain sound farm businesses. Assistance is provided in the form of long-term mortgage credit.

At present, there are eight FCC loans, approved during the period from 1965 to 1978, outstanding to farmers in the Windermere Valley. The total amount of these loans, when approved, was \$377,000, and the total size of these farms at the time of loan approval was 2,118 hectares, of which 386 hectares were cultivated. The loans were used for acquiring farm property, buying livestock, purchasing additional land, constructing buildings, and debt consolidation.

The availability of credit permits a change in ownership or the purchase of additional land and encourages the development of farm businesses. FCC activities result in land being kept in or put into farm production. The FCC, along with the VLA, is involved in the funding of approximately one-third of the commercial farms in the valley and, in many cases, developmental funding has been provided where such funding would otherwise have been difficult to obtain.

3.2 Veterans Land Act

The <u>Veterans Land Act</u>, described in the previous chapter, has provided funding for three full-time farms, comprising 499 hectares. All three are primarily involved in beef cattle, with some forestry operations on the side, and the largest of these ranches is 348 hectares. The land-use effects of the VLA are similar to those of the FCC in that financing for farms has been provided at preferential rates, offering some stimulus to the agricultural sector.

3.3 DREE Agricultural Sub-Agreement

Agriculture in the Windermere Valley has been most affected by the Agricultural and Rural Development Subsidiary Agreement (ARDSA), a five-year agreement signed in 1977. ARDSA is the successor to the old Agricultural and Rural Development Agreement (ARDA) which expired in 1977. The intent of ARDSA is joint federal/provincial programming to encourage development of the agricultural sector and the food-processing industry in rural British Columbia. There are four main programs under the sub-agreement:

- Research, Planning, Training and Market
 Promotion; 2) Coordinated Resource
 Management; 3) Primary Resource Development;
- 4) Support Services and Community Development. Of these programs, only the Coordinated Resource Management Program has had specific effects in the Windermere Valley. This program is designed to increase the grazing capacity of Crown rangeland and help stabilize the beef industry by taking full advantage of the available land resources. Eligible projects include fencing, livestock-handling facilities, rangeland improvements, water development, and the coordination and enhancement of recreation values to ensure that fish. wildlife, and other resources benefit within the range unit. Consequently, projects undertaken by ARDSA are usually extensive in nature, involving either entire ranges or combinations of range units.

Map 1 identifies the areas that are affected by the Coordinated Resource Management Program under ARDSA. The program area comprises the Steamboat Coordinated Resource Management Plan, augmenting an earlier ARDA management plan and consisting of 32,700 hectares across the Columbia river from Radium. The Skookumchuk-Findlay (Torrent) rangeland unit and the Dutch-Findlay rangeland unit west of Columbia Lake are being developed with fences, corrals, and water. The area is also popular for fishing, camping, and hunting. The East Kootenay Range Plan is a resource-management plan covering ten range units; it is designed to improve the units through fencing, corrals, cattle guards, and water-supply provision. Two ranges within the study area have received assistance through this plan.

The final range-development plan is the Toby-Forster range unit in the Horsethief Creek Valley. This management plan was established under the old ARDA agreement. As indicated on the map, this is an extensive range unit that has involved several organizations such as Revelstoke Sawmills. B.C. Hydro, B.C. Fish and Wildlife, Canadian Wildlife Service. Agriculture and Lands British Columbia, and the British Columbia Forestry Service. Since the Toby-Foster is an older plan, some of the problems arising in rangelands and the inter-resource conflicts have been identified. Alienation of Crown land, subdivision, and private development have disrupted the use of the rangeland by ranchers. More fencing is needed; there is a problem with overgrazing; there is a delay in the regeneration of timber after harvesting; there are conflicts between ranching and game, nesting areas, uncontrolled dogs, mechanized recreation. forest encroachment, and garbage disposal. These are mostly land-use related problems and correspond with the major conflicts between agriculture, ranching, and rangeland and recreation, forestry, and rural housing-development activities.

Given the large extent of land covered by range agreements in the Windermere Valley and the thousands of dollars invested by the Federal Government in improvement and maintenance for these rangelands, it is clear that the impact on land use is significant. It is also important to note that the ARDSA agreement contributes to the development of one of the competing land-using sectors--agriculture. The development of rangeland helps beef farming and in some cases enables ranchers to remain in ranching. It is important to note that the amount of rangeland that has been established is nearing the maximum possible for this area. The lack of available further rangeland means that it is difficult for farmers to expand and therefore to remain viable in today's uncertain beef market. To some degree. however, DREE is contributing to the stability of the beef production industry in the Windermere Valley.

4. FORESTRY

Forestry, as one of the major economic activities in the Windermere Valley, represents a significant land use in the valley. It is a competitor with ranching and recreation for available land. There are four federal programs related to the forest industry in the Windermere Valley.

4.1 Industrial Sub-Agreement (DREE)

The first federal program in forestry is the Industrial Development Sub-Agreement with the Department of Regional Economic Expansion. Under this program, \$238,000 has been invested by the Federal Government in a

sawmill at Brisco. This sawmill has provided not only seven additional jobs for residents of the area, but has also created an incentive for the forest industry to produce more timber in the north of the valley. Mill employment has also stimulated residential development in and near Brisco.

4.2 Forestry Sub-Agreement (DREE)

In addition to the Industrial Sub-Agreement. there is a Forestry Sub-Agreement. This agreement is designed to provide for the reforestation, management, and fire protection of B.C.'s forest resource. In the Windermere Valley, there are four projects applying to the entire valley, so it was impossible to determine any particular locations where activities have taken place. The four projects consist of reforestation of old fire areas (\$450,000), juvenile spacing (\$500,000), intensive forest management (\$100,000), and forest fire protection (small amounts of money). These programs encourage forest production and the development of the forestry industry in the valley and in adjacent areas of the East Kootenay.

4.3 Local Employment Assistance Program

The Department of Employment and Immigration, under its Local Employment Assistance Program (LEAP), has over the past two years been administering a forestry project in the Toby Creek area (see Map 1). LEAP is directed towards developing permanent jobs for the unemployed, so the effects on forestry and land use are incidental to this goal. The local project consists of a logging and sawmill operation that is sponsored by the Lake Windermere Lions Club and is located on a secondary lease of 125 hectares of Crown

land. The group involved in this logging owns a portable sawmill that is used on site. Some \$204,000 has been invested by the Federal Government over the two-year period, though there will be no more funding for this project because it expects to meet costs on its own by the spring of 1980.

4.4 Parks

Parks Canada has an indirect connection with the forestry industry in the north end of the Windermere Valley because the forestry operators east of Kootenay National Park must route their logging trucks through the park to Radium Junction and the Revelstoke Sawmill. This entails passing through the narrow and popular Sinclair Canyon and Radium Hot Springs area, adding to an existing problem of traffic congestion. The park road (Highway 93) is the only access route from the Windermere Valley to Calgary, the main service centre for the valley, so logging trucks and commercial through traffic conflict with tourist traffic. The original location of the Revelstoke Sawmill at Radium Junction, the granting of timber rights in an area requiring transportation of logs through the park, and minimal federal/provincial joint planning have exacerbated the traffic problem and the resultant land-use conflicts. This transportation/recreation conflict has not been resolved, is deteriorating, and will present a test for federal/provincial/local coordination and planning. Any attempt to resolve the traffic issue will certainly affect the forest industry.

TOURISM AND RECREATION

The fastest growing land-using sector in the Windermere Valley is recreation. Rapid development of recreation housing and facilities is taking place both in the rural areas and along the lakeshores. Most of the demand for recreational land comes from Calgary: a sample of the assessment rolls for the area shows that a significant proportion of the properties listed are owned by residents of Calgary, indicating that these are part-time dwellings in use for both summer and winter recreational purposes. The Federal Government is playing a major role in this tourism/recreation development through five different programs, the most important of which is DREE's Tourist Industry Development Subsidiary Agreement (TIDSA).

5.1 <u>Tourist Industry Development</u> Sub-Agreement (DREE)

TIDSA is a five-year, 50 million dollar federal/provincial agreement signed in 1978 and aimed at boosting the travel industry and improving Canada's balance of payments by development strategies in five program areas: planning for the travel industry, industry organization, industry upgrading, travel generators, and skiing development.

The Planning Program is designed to develop long-term strategies for the travel industry by identifying trends and future developments and by conducting feasibility and opportunity studies. One project specific to the study area is the \$94,000 Panorama/Windermere Tourism/Settlement Strategy. This program identifies the socio-economic and environmental objectives of tourism

development and related land uses in the Windermere Valley, including present and potential locations of tourism, recreational, and residential development. Considered in the study are appropriate land and residential uses relative to the needs of the valley, the location of hazardous lands, and the servicing implementations required for the recommended development. The objective of the strategy proposal is to assess the options for various levels of tourism development, up to the level of an international tourist destination in the Windermere Valley. The potential effects on land use of the recommendations of this study are significant since the future direction of economic development in the valley, and therefore of land uses and the resolution of land-use conflicts, could be influenced by the results of the report. This report has been completed and its recommendations have contributed to the development of long-term land-use planning in the valley. It is important to note that this report was carried out in cooperation with the Province of British Columbia. While the study had an active inter-agency Steering Committee. federal departments and agencies other than DREE that may have had an interest in tourism in the area (specifically Parks Canada) were not participants in the study.

Under the Industry Upgrading Program of TIDSA, designed to upgrade travel-industry facilities and infrastructure, there have been DREE grants of some \$850,000 assisting in the construction of a sewage system for the Fairmont Hot Springs Resort. In addition, \$18,000 has been invested in improving the Spruce Grove Campground near Fairmont Hot Springs. These grants have specific effects on sites, though by helping

to provide facilities for visitors, the grants also contribute to the overall development of the valley as a tourist destination.

The Skiing Development Program aids in the development of world-class ski resorts offering year-round multi-recreational facilities. Under the program there are two market-analysis studies being carried out: the first involves heli-skiing in the Bugaboos; the second is a ski market analysis for major ski areas of B.C. The latter includes consideration of an emerging new international resort for the Windermere Valley, with base facilities designed for an eventual capacity of over 1,000 chalets. The Panorama Ski Development will be one of the major attractions in the wintertime for the Windermere Valley, and with support from the TIDSA program it could potentially become an international ski destination.

5.2 Kootenay National Park

Kootenay National Park not only occupies a great deal of land in the northeast of the valley (over 1,400 square kilometers), but it is also one of the major tourist attractions in the valley with its hiking, camping, viewing areas, and the Radium Hot Springs. The direct access through the park to Banff and Calgary means there is a great deal of private, commercial, and visitor through traffic in the park. The land-use effects and problems of the park can be divided into two categories: those having a bearing primarily within the park and those with inter-relationships between the park and its environs.

The major problem in the park is one of

severe traffic congestion within five kilometres of the Radium gate during peak tourist periods, along with steadily increasing pressure on park facilities. Some of the factors contributing to this problem are the severe topography limiting the amount of usable land in the park, the localised occurrence of the unique resource of the hot springs, the variety and number of facilities concentrated in the hot springs area, steadily increasing visitor numbers, and the large volume of through as well as park traffic. The focal area of these problems is in Sinclair Canyon at the extreme southwest end of the park. This is a narrow, constricted, scenic canyon with high tourist attraction for viewing, walking, and hot springs use. Through the congested tourist area flows all the traffic between the Windermere Valley and Alberta. The requirements for increased commercial traffic, the logging traffic described in the previous chapter, heavy trucks from the gypsum mine near Invermere to Alberta, as well as a proposal for park access for up to 70 trucks per day from a proposed magnesite mine east of the park, will all continue to exacerbate the traffic problems.

The relationships between Kootenay National Park and the remainder of the Windermere Valley involve a series of small issues. The most important of these relates to the effects on traffic generation and park facility use of the regional development and growth anticipated in the Windermere Valley. The primary generator of more traffic will be future recreational tourism developments, particularly resorts with recreational-home complexes associated with them. There are already several major resort developments being planned for construction over the next

15 to 20 years. Some of these, such as Fairmont Hot Springs and the Panorama Ski Resort, were discussed in the preceding section of this chapter. Because the anticipated use of these facilities will come primarily from Calgary, the access to these developments will necessarily be through Kootenay National Park and through Sinclair Canyon. There was in 1979 little or no coordination or consultation between those planning the regional facilities requiring park access and Parks personnel, either in Radium or at the Western Regional Headquarters of Parks Canada in Calgary, although more regular consultation is now taking place.

Other unresolved issues between the park and the remainder of the valley include boundary finalization near Radium, encroachment on the park by subdivisions and a golf course, agreements between the Regional District of East Kootenay and the Radium Water Works District for garbage dumping near Edgewater, and sewage disposal to the oxidation ditch at Radium. The water system for the townsite of Radium relies on John McKay Creek, which is completely within the park. The capacity of this creek to support an expanded townsite is being investigated, though there are alternative proposals for constructing a TIDSA-assisted water-diversion project with water sources from the other side of the valley.

It is important to note the lack of early consultation between Parks personnel and those responsible for the studies and tourist developments in the remainder of the Windermere Valley. The land-use effects of decisions respecting vehicular access and all the other unresolved issues will be critical

both for Kootenay National Park and for the remainder of the valley.

5.3 National Historic Site

Parks Canada also operates a National Historic Site near Wilmer--the site of Kootenae House. This site consists of a fenced area of about .5 hectares that includes a cairn. The site is not a major tourist attraction and has no visible impact on neighbouring lands.

5.4 Small-Craft Harbours

The Department of Fisheries and Oceans, under the Fishing and Recreational Harbours Act, owns and operates two small-craft harbours in the Windermere Valley. Small-craft harbours are designed to be public access points to the lakes in the area. The larger of the two harbours is associated with the public beach and park at Windermere and is primarily a boat ramp and launching site. This complex . serves as the major point of public access to the waterfront and is one of the few on Lake Windermere. Conflicts between bathers and boaters have been reported due to the juxtaposition of the two activities. The other small-craft harbour is located near Canal Flats at the south end of Columbia Lake. This harbour has a direct approach from a public road and consists of a gravel ramp and concrete planks for boat launching. With no buildings or equipment and with shallow water, the harbour's use is extremely limited. This small-craft harbour is not well utilized and its isolated location is some distance from the town of Canal Flats.

Until 1978 there was a third small-craft harbour located near the public beach at

Invermere, but at the request of the Invermere municipal representatives the harbour was removed due to conflicts with bathing activities. The municipality then suggested that the small-craft harbour be located at an alternative site near Athalmer, a plan that has been rejected because of the limited finances of the Small-Craft Harbours Branch.

5.5 Transport/Tourist Access

The final project that has land-use effects related to tourism and recreation is the East Kootenay District Airport, described in a previous chapter. Given the airport's location in the centre of the area designated for tourism development, its effects on the increase in tourist use could be significant. The airport's location within the Shuswap Indian Reserve will be an important factor in the future planning of the facility, though an alternative site for a regional airport west of Lake Windermere is also being considered by federal and local officials.

6. WILDLIFE HABITAT PRESERVATION AND THE KOOTENAY RIVER DIVERSION

6.1 National Wildlife Area

In 1973, the Canadian Wildlife Service (CWS) purchased land approximately 5 kilometers north of Invermere in the upper Columbia River Valley and formed the Wilmer National Wildlife Area. Provincial Crown lands in the vicinity of the Wilmer area have also been reserved for wildlife by the Province. For many years, the Columbia Valley has been recognized as strategic wildlife habitat.

particularly as a major staging area for waterfowl on the western flyway. The aim in establishing the National Wildlife Area was to preserve important habitat by preventing conflicting development in the area. The property consists mainly of bottomland. marshes, and lakes on the west side of the Columbia River, with some high, dry, forested rangeland along the western border of the property as well. The upland portion of the National Wildlife Area is included in the Toby-Forster Coordinated Resource Management Plan, discussed above in the chapter on agriculture. The plan is designed to allow all concerned parties, including the CWS. cattle ranchers, timber companies, Christmas tree growers, and private landowners, to participate in management decisions that affect the area. The objective of the plan is to manage the area so as to minimize conflicts of interest and maximize returns in timber, grazing, wildlife, and recreation. The Resource Management Plan provides a good example of coordination between private landowners and both federal and provincial government agencies.

with the exception of the input that the CWS has with respect to management decisions for the entire Toby-Forster Management Plan, the National Wildlife Area has little effect on land use outside of its boundaries. There are six not necessarily mutually exclusive alternatives for the use of the land in the Wildlife Area: wildlife-habitat preservation and/or improvement, cattle grazing, nature interpretation and low-intensity recreation, research, agriculture (crops for wildlife), and trapping and hunting. All of these possibilities could be incorporated into one management plan for the National Wildlife Area. There is at present some unforeseen

and uncontrolled recreational use of the Wildlife Area for hang-gliding, off-road vehicle use, and hunting. The National Wildlife Area, however, ensures that at least some control over the use of this critical habitat area is exercised. Since the Columbia Valley marshlands are considered critical for migratory bird staging, migration, feeding, and nesting, the CWS would like to expand the Wilmer Wildlife Area to include more lands.

6.2 The Kootenay Diversion

A major threat to the wildlife habitat of the upper Columbia River is the proposal by B.C. Hydro to divert the Kootenay River into the Columbia River system at a point south of Canal Flats. This diversion would increase waterflows in the Columbia River, thereby raising levels and lowering water temperatures in Windermere and Columbia Lakes. The project could have serious repercussions for wildlife habitat and recreational use and the possible effects have not, as yet, been thoroughly investigated. Because the diversion is just a proposal (the size of the diversion is not known), it is impossible to determine accurately how it would affect land use in the Windermere Valley. There is also some question as to whether B.C. Hydro is actually serious about proceeding with the diversion or whether the diversion is being used by Hydro in its bargaining with United States power companies over various other conflicts they are involved in. The Federal Government, through the Inland Waters Directorate of Environment Canada, is also playing some part in the hearings for a water licence before the B.C. Water Commissioner. The Inland Waters Directorate has a

representative on various committees that are investigating and reporting on the effects of the Kootenay diversion. Any future federal role could eventually include the International Joint Commission since the waters being considered are boundary waters. The Federal Government could also, as landowner of the Wildlife Area or on behalf of the native peoples on the reserves, become involved in the controversy.

6.3 Habitat Acquisition Through the Agricultural and Rural Development Agreement

DREE, through the old Agricultural and Rural Development Agreement (ARDA) program. cooperated with the Province in another wildlife-habitat preservation project in the Columbia Lake Wildlife Management and Recreation Area (see Map 1). The project entailed the acquisition of some 200 hectares on the east side of Columbia Lake, south of Fairmont. This land is CLI class 1 Ungulate land for which uses inimical to wildlife and recreation, such as subdivision of the land for private homes or development of the land into a potentially uneconomic ranch, had been proposed. The acquisition was primarily at provincial request, and federal finances were simply used to assist in the purchase of the land. Nevertheless, the project marks a direct federal contribution to wildlife-habitat preservation and one of the few instances where federal funding was employed in the acquisition of land.

7. OTHER FEDERAL PROGRAMS AND THEIR LAND-USE EFFECTS

7.1 Indian Lands

Significant areas of federally-influenced land in the Windermere Valley not yet discussed in this paper are the two Indian reserves, the Shuswap Reserve near Invermere and the Columbia Indian Reserve No. 3 along the east side of Lake Windermere (see Map 1). These large tracts of land lie across major intersections and the main north-south highway in the valley. Reserve No. 3 also occupies some of the highest capability agricultural land in the valley, though it is not at present being farmed. Both reserves have potential for recreation and tourist development, especially Indian Reserve No. 3 which has a considerable amount of undeveloped lakefront property. Future land uses are based on the initiatives of the Indian bands, but the interests and intentions of the bands are not known at this time. However, due to the location and strategic nature of the property, any decisions or actions taken in this area will have a significant influence on land use. Local planners have acknowledged that the lack of information regarding the future development of both reserves creates considerable uncertainty for them in planning around the strategically-located Indian lands.

7.2 Special ARDA

Associated with the Indian Reserves is the DREE program called Special ARDA. This program is similar to the Agriculture and Rural Development Subsidiary Agreement

(ARDSA), but it is specifically directed towards Native and Inuit groups and allows up to 100% federal funding for specific projects. A hotel project proposed by a Calgary firm has been the only application under Special ARDA in the study area to date. This proposal was withdrawn when the firm was informed that the band would require equity in the project and not just the job opportunities generated by the project. It should be noted that the band was not enthusiastic about the proposed hotel. so its development was not pursued. The interest of a commercial group in this sort of project on reserve land does indicate. however, that the area is an attractive one for potential developers.

7.3 Planning Navigable Waters and Floodplains

Another federal effect on land use could arise through a possible requirement that Lake Windermere be zoned for recreational use. This would naturally involve the Ministry of Transport, since Lake Windermere is a navigable waterway. Zoning of water is a novel concept, and it could prove to be a practical method for controlling heavily-used recreation areas.

There is also an agreement currently being negotiated between British Columbia and the Inland Waters Directorate concerning flood-risk mapping. This program, if agreed upon, would identify lands with 20- and 100-year flood levels and designate these areas as subject to certain restrictions for federal, provincial and municipal flood-relief assistance. For instance, areas within flood levels could not be zoned as residential and still be considered for relief assistance in the event of a flood. Such mapping is, in

fact, land-use zoning and will have attendant effects, particularly in parts of Athalmer, Canal Flats and Windermere. If the agreement is signed, it is not known what priority the Windermere Valley has for flood-risk mapping, though it is thought that the maps would be prepared within a period of three years.

8. CONCLUSIONS

The Federal Government has a substantial cumulative impact on land use and on land planning in the entire Columbia-Windermere Valley. The federal influence on land use derives from the ownership of land, from the use of various financial and regulatory programs that directly affect the economy of the valley, and from a continuing involvement in the planning process through a variety of programs. The principal federal involvements fall into a number of categories as indicated below.

8.1 Ownership of Land

The Federal Government owns several large areas of land within the valley-- notably Kootenay National Park, two Indian Reserves located in the centre of most agricultural, tourist, and industrial activity in the valley, a National Wildlife Area, and a National Historic Site. All of these tracts of land are removed from the normal economic activity of the valley and placed into a reserved or preserved category.

8.2 Service Facilities

The Federal Government owns many small areas of land required in providing such key

services as police, post office, small harbours, radio, and television. These facilities have local importance only as a land use, although the services provided by them affect many of the activities in the valley. Because of the central urban location of the post office and the police facilities, the concentration of urban development in existing centres may be encouraged.

8.3 Funding Programs

The Federal Government has several funding programs, directed at private landowners and users, that promote residential development, development of small industries and farms, and provision of infrastructure. While similar developments could well take place without federal funding, these funds are usually available at preferential rates or with favourable conditions, thereby promoting projects that would not otherwise take place so readily.

8.4 Funds for Coordinated Development

The Federal Government, primarily through the Department of Regional Economic Expansion, provides funds for coordinated planning in tourism, in regional development, and in rangeland development in the Columbia-Windermere Valley. Substantial investment has been made in rangeland management units, in a coordinated development plan related primarily to the tourist industry, and in the marketing of several of the recreational facilities available in the region. In addition, CMHC directly affects some aspects of local subdivision planning by funding water and sewage projects and by restricting NHA loans

to serviced or designated areas.

8.5 Federal Role In Planning and Coordination

Through its involvement in many industrial sectors, the Federal Government is included in the planning for many parts of the valley. There is not, however, a direct federal involvement in any form of comprehensive regional planning other than on a sector-by-sector basis or through specific lands such as the coordinated rangeland units, the Indian reserves, and the parks. In these latter cases, planning occurs primarily within the boundaries of the particular land unit. At present, there is evidence of a lack of day-to-day communication between the Federal Government and other levels of government within the valley, all of whom share the means to influence land use within the region. While there may be some coordination at higher managerial levels, the day-to-day planning by each level of government appears to take place relatively independently. The researchers of this project were often able

to carry information from one agency or sector to another and identify for them areas of potential conflict or joint concern.

The Columbia-Windermere Valley was initially chosen for a regional study of the effects of federal programs because it was assumed that this was an area of minimal federal involvement. The researchers expected to discover a few localized effects related to such facilities as police or post office and perhaps one or two minor funding programs. The results contained in this paper show that the Federal Government involvement in this region is far broader than was initially expected. In the investigation of the impact of federal programs, it was discovered that over a dozen agencies were independently carrying out specific program activities and that between them these agencies had many more projects. As a randomly selected example of the impact of federal programs on a region of Canada, the Windermere Valley has demonstrated that the Federal Government can through a variety of programs potentially exercise a substantial influence on land use in nearly all areas of the nation.

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