

The Potential Economic Impact
of a New National Park
in Natural Region #7:
Wolf Lake Area of Yukon
and Jennings Lake Area of
British Columbia



Wolf Lake, Yukon

The Outspan Group Inc.

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of a New National Park
in Natural Region #7: Wolf Lake Area of Yukon
and Jennings Lake Area of British Columbia



Jennings Lake, British Columbia

Prepared for:

Canadian Parks and Wilderness Society, Yukon Chapter

Prepared by:

The Outspan Group Inc.

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Executive Summary

This report presents the results of a study to estimate the potential economic impacts associated with a possible new National Park in Natural Region #7, specifically in the Wolf Lake area of Yukon (i.e. south-eastern Yukon) and/or the Jennings Lake area of northern British Columbia. The purpose of the research is to indicate the possible economic impacts that a new national park development might have, and by doing so, allow for an informed discussion of the consequences of park development.

Parks Canada has indicated an interest in completing the system of national parks. This goal is supported by a recent commitment by the Government of Canada to fund park establishment. The system is completed by having at least one national park in all of Canada's natural regions. Currently, Natural Region #7, which is characterized by mountains, broad plateaux, plains, basins and trenches is unrepresented in the system. While this is a large complex region, there are two areas that are being considered as representative of this natural region - the Wolf Lake area in Yukon and the Jennings Lake area in British Columbia. These areas fall within the traditional territories of the Teslin Tlingit First Nation and the Kaska Dena Council, and some potential overlap in British Columbia with Tahltan lands and Taku River Tlingit territory. The Teslin Tlingit have a Final Agreement, while the other three potentially affected First Nations have not yet negotiated a land claim agreement. The map on page 3 shows the broad areas being considered.

In an effort to assist with the discussion on the possible establishment of a National Park, CPAWS - Yukon Chapter in cooperation with CPAWS - BC and the Kaska Dena Council initiated this study of the potential economic impacts associated with a new park. This study presents the results of research into these impacts. The report includes an inventory of tourism facilities and services in the area of concern and then presents the forecast level of park and visitor spending for two alternative locations for the park: Wolf Lake in Yukon and Jennings Lake in British Columbia. The economic impacts associated with the forecast spending is calculated and a comparison of alternatives is provided.

Inventory

The inventory of tourism facilities and services found that there was an uneven distribution in the area studied, with more being available in the Yukon, especially the Watson Lake area. It was also found that there were limited services in many areas. Overall, there could be tourism facility/service supply shortfalls in the area if a new national park attracted large numbers of new visitors to the area.

Wolf Lake, Yukon Alternative

Assessment of the Wolf Lake alternative included forecasts of Parks Canada spending and new visitor spending that could be attributed to the new national park. The forecast of Parks Canada spending was based on information supplied by Parks Canada: likely approximately \$14 million over ten years for park planning and establishment. The consultants prepared a hypothetical park development scenario based on a ten year forecast of spending on capital, operations and wages/salaries. This spending forecast was converted to an annual spending summary that corresponded to the expenditure categories of the economic impact model used.

Visitor numbers and spending were also forecast. Two visitor segments were examined: Alaska Highway Drive-By visitors and Destination Visitors. A variety of data sources were used to predict the number of park visitors in each segment. Over the first ten years of park establishment, it was calculated that a total of 97,500 Drive-By visitors would visit Parks Canada facilities related to the new National Park, with the number of visitors being approximately 14,500 each year in the last five years. The number of destination visitors over this same period was estimated at 11,150, with the number growing steadily. The total number of visitors for the 10 year period was estimated at 108,650.

Visitor spending for each visitor segment was also forecast using several information sources. Using conservative estimates of visitor spending per person, the total forecast spending is still significant over 10 years: Alaska Highway Drive-By - \$750,750; Destination - \$15,275,000; for a total of \$16,025,750. This estimated spending by visitors was broken down by year into categories used by the economic impact model.

Jennings Lake, British Columbia Alternative

The same overall process was followed for the Jennings Lake alternative as for the Wolf Lake alternative. Virtually the same park development scenario was used and the same overall level of expenditure was applied (i.e. \$14 million over 10 years). Again, a projected annual spending schedule was developed and the results of this annual spending converted into expenditure categories of the economic impact model.

Visitor numbers were forecast in a manner consistent with the Wolf Lake analysis. The same visitor segments were used: Cassiar Highway Drive-By and Destination Visitors. The visitor numbers projected over the 10 year period were: Cassiar Highway Drive-By - 41,300, and Destination Visitors - 11,150. The total number of visitors was forecast to be 52,450 for the first 10 year period.

Visitor spending was also forecast for each segment. The spending by Destination Visitors was assumed to be the same as that derived for the Wolf Lake analysis - i.e. \$15,275,000 over 10 years. Spending by the Drive-By visitor segment was forecast to total \$725,400 based on tourist expenditure data for that area of B.C. Total visitor spending was estimated at just over \$16 million for these first ten years. This estimated visitor spending was put into annual estimates and

converted into expenditure categories used by the economic impact model.

Forecast Economic Impacts

The economic impact model used to calculate economic impacts - Economic Impact Model for Parks and Protected Areas (EIMPA) - produces very conservative economic impact estimates. The impact estimates are therefore considered the minimum impacts expected. Economic impacts were measured using gross domestic product (GDP), labour income, employment and tax revenues. The model was run for each year for each location and a series of detailed impact tables were produced. Impacts were generated for the local area as well as the territory/province.

A) Wolf Lake Impacts

Local Area (Teslin-Watson Lake)

Although total visitor spending is forecast to exceed Parks Canada spending in the Teslin-Watson Lake area by about \$2 million, the economic impacts of this spending are substantially different - Parks Canada spending has a much higher impact. However, of the combined spending (\$30 million over 10 years) the average annual GDP impact in the local area is forecast to be over \$1 million. This represents value added that is expected to be retained in the area. Labour income should be approximately \$900,000 on average and employment should be over 28 full time equivalents (FTE) per year during this ten year period. This could mean approximately 85 jobs per year in the local area, where most economic impacts are going to be felt.

Yukon Territory

The average annual GDP impact is forecast to be approximately \$1.4 million in the territory and the labour income impact should exceed \$1.1 million annually. Employment impacts are forecast to vary between a low of 18 FTE in the first year of park establishment to a high of 43 FTE in the tenth year. Tax revenue to all levels of government is forecast to average over \$55,000 each year.

Other Impacts

Naturally there will be other economic effects from the creation of a new National Park. Although traditional use of the lands will probably be maintained, there will likely be some restriction on other land uses such as forestry, mining and other extractive resource activities. However, there will also be commercial opportunities for individuals in the area. These opportunities should include new business development or expansion of existing businesses, as well as employment opportunities with the park and/or the new businesses. The opportunities relate to the provision of goods and services to Parks Canada and for facilities and services for visitors.

B) Jennings Lake Impacts

Local Area (Good Hope Lake)

Similar to Wolf Lake, Parks Canada spending has a much higher impact. However, of the combined spending (\$30 million over 10 years) the average annual GDP impact in the local area is forecast to be over \$1 million; value added that will be retained in the area. Labour income should be approximately \$900,000 on average and employment should be just under 28 FTE per year during this ten year period: approximately 85 jobs per year in the local area.

British Columbia

The average annual GDP impact is forecast to be approximately \$1.6 million in the province and the labour income impact should exceed \$1.2 million annually. Employment impacts are forecast to vary between a low of 21 FTE in the first year of park establishment to a high of 48 FTE in the third year when construction activities are expected to peak. Tax revenue to all levels of government is forecast to average just under \$78,000 each year.

Other Impacts

There will also be other economic effects from the creation of a new National Park. Traditional land use are expected to be maintained but there will likely be some restriction on other extractive land uses such as forestry and mining. However, there will also be commercial opportunities for individuals and businesses in the area. These opportunities should include new business development or expansion of existing businesses, as well as employment opportunities with the park and/or the new and expanding businesses. Forecast opportunities will be for the provision of goods and services to Parks Canada and for facilities and services for visitors.

Conclusion

The comparison of economic impacts for the two areas showed that the effects were quite similar, even though the number of visitors expected to visit Jennings Lake is about half that expected to visit Wolf Lake. Table E1 summarizes the economic impact results.

It is also important to note, however, that there is the potential for a larger mosaic of trans-boundary conservation lands that could have a national park embedded within other types of land designations such as provincial/territorial parks, habitat protection areas or wildlife areas. A national park also could be trans-boundary in nature or could be established in more than one unit with conservation lands connecting the units. The economic impacts associated with these types of landscape-scale scenarios are more difficult to estimate since the potential configuration of such conservation lands is unknown. A mosaic of conservation lands could be achieved through

regional land use planning processes, provided the local communities and First Nations supported such an approach to land use.

Table E1 Comparison of Total Ten Year Economic Impacts on the Local Area and Territory/Province for a New National Park in Natural Region #7				
Impact Area	Impact			
	GDP (millions)	Labour Income (millions)	Employment (FTE)	Tax Revenue (thousands)
Yukon				
Local Area (<i>Teslin-Watson Lake</i>)	\$10.6	\$9.1	285	NA
Territory	\$14.3	\$11.4	348	\$557
British Columbia				
Local Area (<i>Good Hope Lake</i>)	\$10.6	\$8.9	279	NA
Province	\$16.5	\$12.7	392	\$780
GDP - Gross Domestic Product (an estimate of the dollar value of economic activity) FTE - Full Time Equivalents (One FTE equals one year of work for one person).				

Table of Contents

	Page
<i>Executive Summary</i>	<i>i</i>
1. Introduction	1
2. Tourism Inventory	5
3. Wolf Lake Alternative	9
Forecast: Parks Canada Expenditure Over 10 Years	9
Forecast: Visitor Markets and Numbers	14
Current Regional Visitor Market Features	14
Visitor Segments	15
1. Alaska Highway Drive-By Visitors	16
2. Destination Visitors	20
3. Summary of Forecast Visitor Numbers	23
Forecast: Visitor Spending	23
Drive-By Visitor Spending	24
Destination Visitor Spending	26
Summary of Visitor Spending Estimates	28
4. Jennings Lake Alternative	31
Forecast: Parks Canada Expenditure Over 10 Years	31
Forecast: Visitor Markets and Numbers	35
Current Regional Visitor Market Features	35
Visitor Segments	36
1. Cassiar Highway Drive-By Visitors	36
2. Destination Visitors	39
3. Summary of Forecast Visitor Numbers	40
Forecast: Visitor Spending	41
Drive-By Visitor Spending	41
Destination Visitor Spending	43
Summary of Visitor Spending Estimates	44

5.	Forecast Economic Impacts	48
	Definitions of Impact Measures Used	49
	Wolf Lake Economic Impacts	49
	Summary of Wolf Lake Economic Impacts	56
	Other Wolf Lake Economic Impacts	58
	Jennings Lake Economic Impacts	59
	Summary of Jennings Lake Economic Impacts	66
	Other Jennings Lake Economic Impacts	68
6.	Conclusion - Comparison of Alternatives	70
	References	74
	Technical Appendices	75
	1. Tourism Facilities and Services Inventory	76
	2. Hypothetical Park Scenario	82
	3. Detailed Economic Impact Printouts	86

Photos provided courtesy of CPAWS - Yukon and CPAWS - BC

Natural Regions Map adapted from the Parks Canada website

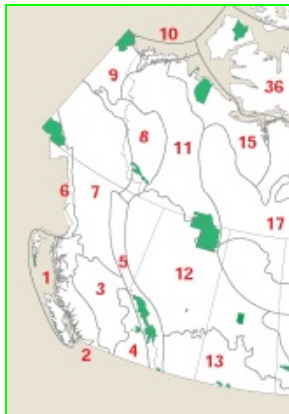
Study Area Map courtesy of CPAWS - Yukon

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The Potential Economic Impact of a New National Park in Natural Region #7: Wolf Lake Area of Yukon and Jennings Lake Area of British Columbia

1. Introduction

This report presents the results of a study to estimate the potential economic impacts associated with a possible new National Park in Natural Region #7. It examines the potential economic impacts of the possible development in the Wolf Lake area of Yukon (i.e. south-eastern Yukon) and/or the Jennings Lake area of northern British Columbia. The purpose of the research is to indicate the possible economic impacts that a new national park development might have, and by doing so, allow for an informed discussion of the consequences of park development.



Parks Canada has indicated an interest in completing the system of national parks. This goal is supported by a recent commitment by the Government of Canada to fund park establishment. The system is completed by having at least one national park in all of Canada's natural regions. Currently, Natural Region #7 (see map at left), which is characterized by mountains, broad plateaux, plains, basins and trenches is unrepresented in the system. While this is a large complex region, there are two areas that are being considered as representative of this natural region - the Wolf Lake area in Yukon and the Jennings Lake area in British Columbia. These areas fall within the traditional territories of the Teslin Tlingit First Nation and the Kaska Dena Council, and some potential overlap in British Columbia with Tahltan lands and Taku River Tlingit territory. The Teslin Tlingit have a Final Agreement, while the

other three potentially affected First Nations have not yet negotiated a land claim agreement. The map on page 3 shows the broad areas being considered.

The process of national park establishment is a long one and can be quite a complex undertaking, especially if there are multiple governments and stakeholders in the area under consideration. Since national parks are 'natural parks,' they are frequently and usually located in rural and undeveloped areas of the country. The process of park planning includes public participation and negotiations with resource owners and/or those with an interest in the resources of the area. Naturally this includes First Nations, provincial and territorial governments, other federal departments and agencies, local governments, as well as commercial interests and residents in the area. If a park is to be established in either of the areas discussed in this report, Parks Canada will be undertaking a significant effort in discussing options and development possibilities with these

many stakeholders. Regional Renewable Resource Councils will play a significant advisory role in any discussions related to park establishment. Frequently, for northern parks, there is an Impacts and Benefits Agreement with the affected First Nation(s).

This report is not part of the Parks Canada planning process but is an effort on the part of the Canadian Parks and Wilderness Society, Yukon and B.C. Chapters, and the Kaska Dena Council to provide information on the possible economic impacts if a national park is established. This report on potential economic impacts is without prejudice to existing land claim agreements or any future land claim negotiations. Further and more detailed economic analysis that forms part of a feasibility study will likely be carried out in the future, if a new national park is to be established.

This study did not assess the socioeconomic costs and benefits of park establishment relative to other potential land uses, such as resource extraction or maintaining the status quo. Such a study would be an essential part of further research work on potential park establishment, should the regional governments, communities and First Nations choose to endorse further discussions. This study presents the positive economic impacts of park establishment, that could then be compared with other land use choices. A schematic diagram of the economic impact process is shown in Figure 1 (page 4).

Conservation, biodiversity, cultural, wilderness and wildlife values related to potential park establishment are also beyond the scope of this study.

Several land use and resource planning processes are underway in the region. All of these could play a role in the potential establishment of a national park in the area. This study is intended solely to help inform decision-makers and the public about the potential economic impacts of a new national park, should the provincial and territorial governments, First Nations, and communities wish to consider a national park as a land use option.

The planning processes that could affect consideration of a national park include:

- Teslin Regional Land Use Plan
- Teslin region wildlife management and forest management plan
- Regional forest management planning in Kaska territory
- Taku River Tlingit land plan and conservation area design
- Province of British Columbia land and resource planning processes in the Dease Lake region.

This report presents information on the tourism facilities and services in the areas where a proposed park may be located, as well as the data gathered and analysis undertaken to estimate the possible spending by Parks Canada and the attributable spending of potential park visitors. The economic impacts associated with the described spending are also presented. The report concludes with a comparison of the two alternatives examined for the possible new park.

Map 1 - Wolf Lake and Jennings Lake Area

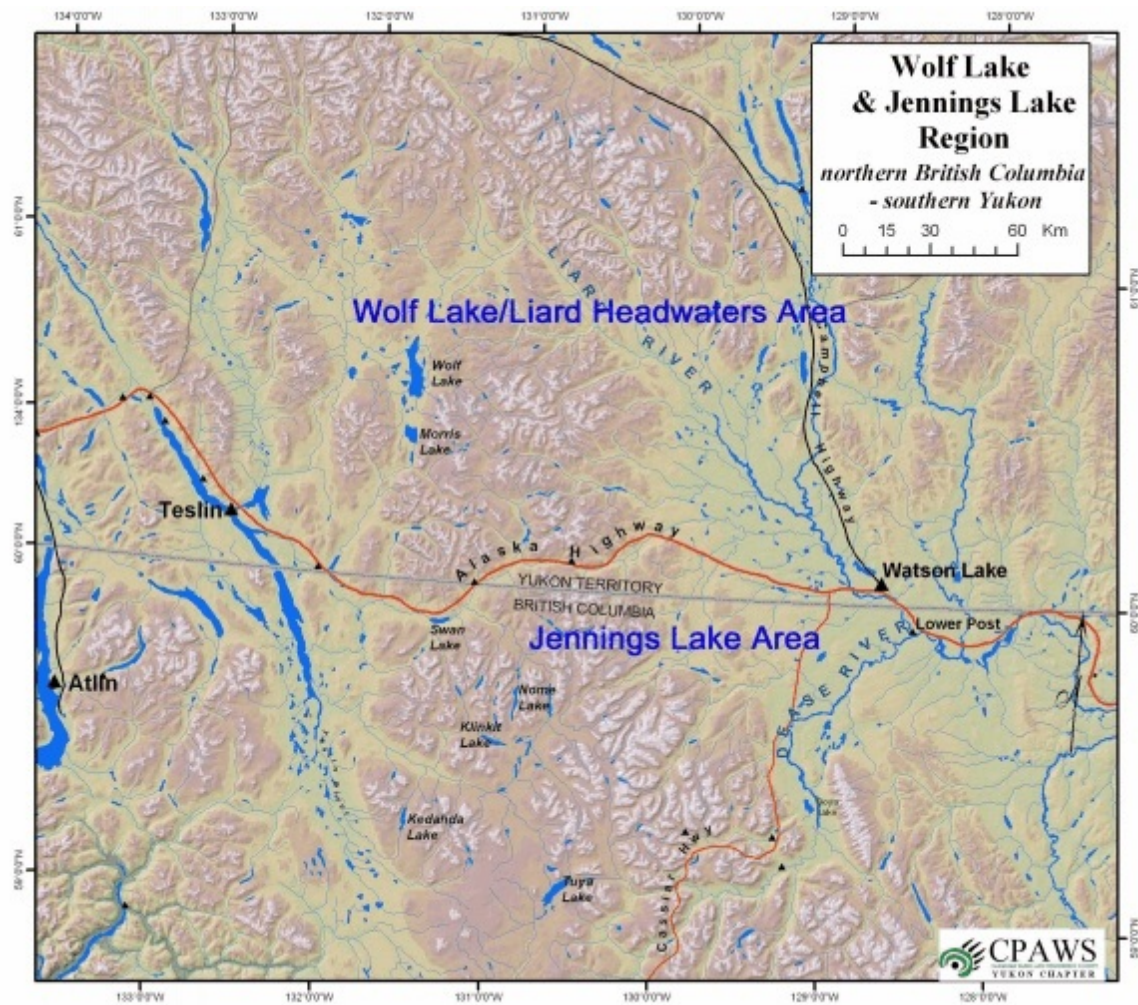
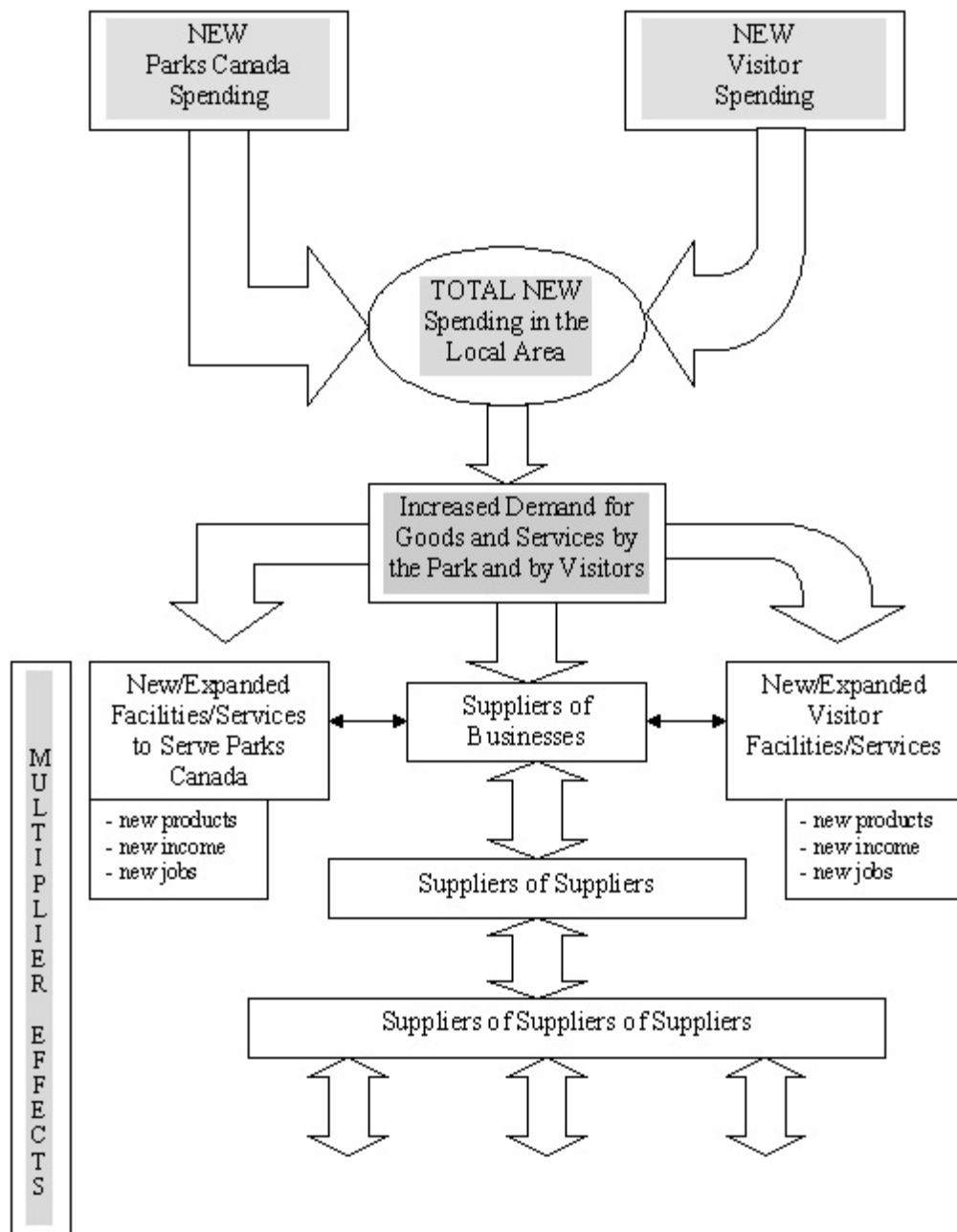


Figure 1
How Economic Impacts Work



2. Tourism Inventory

In order to understand the dynamics and characteristics of the tourism industry in the areas where the park might be located, an inventory of tourism facilities and services was prepared. This inventory was undertaken in October, at the end of the 2004 tourist season. The following four tables (Tables 1 - 4) present summaries of these facilities and services along different stretches of the Alaska and Cassiar Highways. Four different stretches of the highways are used:

1. Alaska Highway: Watson Lake to Junction with Cassiar Highway,
2. Alaska Highway: Cassiar Highway Junction to Teslin,
3. Teslin Area, and
4. Cassiar Highway: Dease Lake to the Junction with the Alaska Highway.

Table 1 of the inventory presents information on accommodation facilities. The majority of the accommodation establishments and rooms along these stretches of the Alaska Highway are

<p>Table 1 Summary of Tourist Accommodation Facilities in Distinct Areas Along the Alaska and Cassiar Highways 2004</p>									
Accommodation Type	Area*								Total in All Areas
	WL - CH		CH - Teslin		Teslin		Cass Hwy.		Rooms/ Sites
	# Est.	Rms/ Sites	# Est.	Rms/ Sites	# Est.	Rms/ Sites	# Est.	Rms/ Sites	
Year-round Roofed Accom	1	6	1	13	2	14	3	52	85
Campgrounds	4	370	1	15	1	27	4	131	543
Roofed Accommodation & Camping									
Roofed - winter	8	141	1	11	1	10	-	-	162
Roofed - summer	9	189	3	45	3	28	3	38	300
Camping			3	147	3	138	3	88	373
Total	22	706	9	231	10	217	13	309	1463
<p>* the areas indicated are as follows: WL - CH: Alaska Highway, Watson Lake to Cassiar Highway; CH - Teslin: Alaska Highway, Cassiar Highway to Teslin; Cass Hwy.: Cassiar Highway, Dease Lake to Junction with Alaska Highway.</p>									

located in the Watson Lake area. In all areas, the majority of accommodation establishments are seasonal in nature, operating in the summer only. However, the total number of rooms/sites along the Alaska Highway sections is well over 1,100, suggesting a significant capacity to handle summer visitor volumes.

Table 2 presents information on the availability of food and beverage establishments along these same sections of the Alaska and Cassiar Highways. This table shows that there is some variation between summer and winter services availability: more service is available during the summer. This table also shows that the Teslin area has the lowest food and beverage capacity of all areas considered, indicating a possible need for growth.

Table 2 Summary of Tourist Food and Beverage Facilities in Distinct Areas Along the Alaska and Cassiar Highways 2004									
Food & Beverage Type	Area*								Total in All Areas
	WL - CH		CH - Teslin		Teslin		Cassiar Hwy.		
	# Est.	Cap.	# Est.	Cap.	# Est.	Cap.	# Est.	Cap.	Capacity
Food and Beverage (with Accommodation)									
Summer	4	45	4	181	3	90	1	88	404
Winter	3	33	2	97	1	30	0	0	160
Restaurants-Take-outs									
Summer	4	105	0	0	1	n.a.	3	137	242
Winter	4	105	0	0	0	0	2	46	151
Total									
Summer	8	150	4	181	4	90	4	225	646
Winter	7	138	2	97	1	30	2	46	311
* the areas below are as follows: WL - CH: Alaska Highway, Watson Lake to Cassiar Highway; CH - Teslin: Alaska Highway, Cassiar Highway to Teslin; Cassiar Hwy.: Cassiar Highway, Dease Lake to Junction with Alaska Highway. Note: Cap. - capacity; n.a. - not available									

Tables 3 and 4 present information on various tourist facilities and services - from grocery stores to bus transportation and the availability of air services. Table 3 is a summary on an annual basis,

while Table 4 presents information on other facilities and services where there are differences between summer and winter.

Table 3 shows that the availability of these services is extremely limited. With the exception of highway pull-offs, most of the facilities/services are located in the Watson Lake area or along the Cassiar Highway. Teslin has some facilities/services but generally has fewer than the other areas.

<p style="text-align: center;">Table 3 Summary of Various Tourist Facilities and Services in Distinct Areas Along the Alaska and Cassiar Highways 2004</p>					
Facility/Service	Area*				Total in All Areas
	WL - CH	CH - Teslin	Teslin	Cassiar Hwy.	
	No. Est.	No. Est.	No. Est.	No. Est.	No. Est.
Food - Grocery Stores	1	0	1	1	3
Highway Pull-Offs	0	10	0	13	23
Scheduled Air	0	0	0	1	1
Air Charter	3	0	0	2	5
Air Facilities	2	1	3	2	8
Bus Transport	1	0	1	0	2
Event	10	0	0	1	11
Tour Operator	3	0	2	0	5
<p>* the areas below are as follows: WL - CH: Alaska Highway, Watson Lake to Cassiar Highway; CH - Teslin: Alaska Highway, Cassiar Highway to Teslin; Cassiar Hwy.: Cassiar Highway, Dease Lake to Junction with Alaska Highway. Note: No. Est. - number of establishments.</p>					

Table 4 includes a different set of tourist facilities and services from Table 3. This table shows that the highway between the Cassiar Highway and Teslin has the fewest services for tourists. This is a sparsely populated area and so the result is not surprising. Automobile services (gas and repairs) are generally located in population centres such as Watson Lake.

<p style="text-align: center;">Table 4 Summer and Winter Inventory of Selected Tourist Facilities and Services in Distinct Areas Along the Alaska and Cassiar Highways, 2004</p>					
Facility/Service	Area*				Total in All Areas
	WL - CH	CH - Teslin	Teslin	Cassiar Hwy.	
	No. Est.	No. Est.	No. Est.	No. Est.	No. Est.
Transport - Gas					
Summer	5	3	2	4	14
Winter	4	1	2	4	11
Transport - Repairs					
Summer	7	0	2	3	12
Winter	-	0	2	3	5
Retail					
Summer	8	2	4	6	20
Winter	5	1	2	4	12
Recreation					
Summer	9	2	6	1	18
Winter	7	0	3	-	10
Attractions					
Summer	6	0	4	-	10
Winter	4	0	0	-	4
<p>* the areas below are as follows: WL - CH: Alaska Highway, Watson Lake to Cassiar Highway; CH - Teslin: Alaska Highway, Cassiar Highway to Teslin; Cassiar Hwy.: Cassiar Highway, Dease Lake to Junction with Alaska Highway. Note: No. Est. - number of establishments.</p>					

Appendix 1 contains a list of the establishments upon which these inventory numbers are based as well as the field notes taken during the data collection exercise. The field notes provide an added perspective to the tourism activities and features in the areas where a new park might be located.

3. Wolf Lake Alternative

This chapter of the report presents information on the first of two alternatives for the location of the possible new national park: Wolf Lake in southern Yukon. The actual site for a national park



McDonald Lake looking east to Pelly Mountains, Yukon

has not been determined: this would emerge over time and through negotiations with the many stakeholders in the area of Wolf Lake. The map on page 3 shows the area in Yukon being considered but the analysis of this alternative from an economic impact perspective does not require a defined site. Each alternative presents forecasts of spending by Parks Canada, as well as by the predicted visitors; this information is used

to calculate a series of economic impacts.

Forecast: Parks Canada Expenditures Over 10 Years

If a new national park is developed in the Wolf Lake area, Parks Canada Agency will have to commit funds for capital development of facilities and for on-going operations, maintenance and repair. The amount of funding and the type of expenditures made will depend upon the proposed developments, facilities and services proposed. These decisions are made during the park establishment and planning process which occurs once a decision has been taken about designation of the park and will involve local and other stakeholders.

Clearly, the planning process, if a new park is actually established, is some time in the future. However, at this point, some assumptions about the likely levels and types of expenditures by Parks Canada in the creation of a new park will provide a starting point for understanding the potential economic impacts of such a park. Very brief discussion with Parks Canada staff

provided some general direction on these matters; this was followed by an examination of the experiences in establishing other national parks. Our forecasts of Parks Canada spending have been based on the only financial figure provided by Parks Canada - an estimated \$14 million to be spent over the first ten (10) years - once agreement has been reached on park establishment.

The consulting team prepared a national park development scenario to provide a basis for the allotment of funds that Parks Canada is likely to spend on development and operations over this ten year period. This concept is based on previous national park establishment characteristics and spending sequences, but **originates solely with the consultants and may not represent the eventual concept adopted by Parks Canada Agency nor reflect the amount to be spent.** Our Expenditure Forecast is presented in Appendix 2, with a financial summary presented here.

It is also envisaged that the type of development at Wolf Lake will be similar in scope and character as at Nahanni National Park in the Northwest Territories. As a consequence, for the purposes of this study, it is assumed that a new national park would likely have the following characteristics:

- most facilities will be integrated into the local communities (Teslin and/or Watson Lake);
- the park would likely provide basic visitor services - information, interpretation, tourism services;
- the park will allow for and encourage commercial outfitter and guiding services;
- there will be a cooperative arrangement for the management of the park with local people;
- facility development in the park financed by Parks Canada would likely be relatively modest, and consist of:
 - headquarters office building with associated visitor centre and parking area
 - hiking trails
 - interpretive displays
 - park signage
 - warden cabin and accommodation for staff at Wolf Lake
 - remote group camping areas at Wolf Lake
 - boat and float plane docking facility at Wolf Lake.

The type of facilities and developments **hypothetically** considered are described in a bit more detail in Appendix 2.

Our hypothetical park development scenario suggests that \$4.8 million will be spent on capital development; \$3.6 million on wages and salaries; and \$5.5 million on operations and management. Table 5 forecasts how these possible capital and operational expenditures might be spent over the first ten years of park establishment. This table shows that most of the capital development will occur in the first five years of park development, and that park management operations are also developing. After this first five year period, there is a levelling off of spending resulting in more

consistent annual expenditure. Table 5 also shows that spending on operations and management injects a significant annual sum (approximately \$9.7 million in total during the first ten years) into the local economy that in total is over twice the amount spent on capital developments.

In order to calculate the economic impacts associated with the spending described in Table 5, these annual expenditures had to be converted into expenditure categories used by the Economic Impact Model for Parks and Protected Areas (EIMPA). Table 6 summarizes the transformation of the annual values presented in Table 1 to model (EIMPA) categories for each year. Note that the total amount spent each year remains the same as that shown in Table 5. It is these annual values presented in Table 6 that will be used to calculate economic impacts associated with Parks Canada spending.

Table 5 - Hypothetical Development and Operations Scenario Developed by *The Outspan Group Inc.*
Possible Ten Year Expenditure Plan for Wolf Lake

Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
CAPITAL											
Visitor Reception Centre		500000	1500000	650000							2650000
Interpretive Wayside					60000						60000
Remote Camp, Wolf Lake	100000	120000									220000
Park Signage		50000	50000	75000							175000
Park Office, Wolf Lake	100000	140000									240000
Staff Residences, Teslin	250000	250000									500000
Infrastructure Support				200000	200000	200000	200000	200000			1000000
Sub-Total	450,000	1,060,000	1,550,000	925,000	260,000	200000	200000	200000			4845000
OPERATIONS											
Wages and Salaries	150000	250000	320000	350000	380000	400000	415000	450000	450000	450000	3615000
Operations	400000	450000	500000	600000	300000	300000	175000	100000	100000	130000	3055000
Research	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	500000
Cooperative Management	75000	75000	75000	75000	75000	75000	75000	75000	75000	75000	750000
Planning & Design	100000	250000	200000	46500							596500
Sub-Total	775,000	1,075,000	1,145,000	1,121,500	805,000	825,000	715,000	675,000	675,000	705,000	9051500
Contingencies (\$63,850 added to each year)											638500
Total	1288850	2198850	2758850	2110350	1128850	1088850	978850	938850	738850	768850	14000000

Table 6 - Summary of Hypothetical Parks Canada Development and Operations Spending, By EIMPA Expenditure Category

Expenditure Category	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
CAPITAL											
Repairs											
Residential Construction	275,000	600,000	1,000,000	400,000	60,000						
Non-Residential Const.	70,000	215,000	50,000	75,000							
Access Roads/Parking		50,000	100,000	50,000							
Road/Parking Repair											
Other Engineering Const.	20,000	60,000	100,000								
Professional Services	85,000	55,000									
Exhibits/Furniture		10,000	300,000	200,000							
Other Expenditures		70,000		200,000	200,000	200,000	200,000	200,000			
Sub-Total	450,000	1,060,000	1,550,000	925,000	260,000	200,000	200,000	200,000			5,310,000
OPERATIONS											
Utilities	15,000	15,000	25,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	160,000
Printing & Publications	9,000	9,000	14,000	19,000	7,000	7,000	5,000	7,000	7,000	7,000	91,000
Presentations			5,000	10,000	30,000	15,000	10,000			10,000	80,000
Professional/Bus Services	190,000	335,000	305,000	192,500	105,000	115,000	75,000	95,000	85,000	85,000	1,582,500
Other Business Services		20,000	30,000	90,000	10,000	10,000	25,000			15,000	200,000
Travel	73,000	73,000	90,000	110,000	75,000	55,000	58,000	55,000	55,000	55,000	699,000
Other Expenditures	401,850	436,850	419,850	398,850	246,850	271,850	175,850	116,850	126,850	131,850	2,727,500
Sub-Total	688,850	888,850	888,850	835,350	488,850	488,850	363,850	288,850	288,850	318,850	5,540,000
Wages and Salaries	150,000	250,000	320,000	350,000	380,000	400,000	415,000	450,000	450,000	450,000	3615000
TOTAL	\$1,288,850	\$2,198,850	\$2,758,850	\$2,110,350	\$1,128,850	\$1,088,850	\$978,850	\$938,850	\$738,850	\$768,850	\$14,000,000

Forecast: Visitor Markets and Numbers

This section describes the process used to generate forecasts of the number of visitors likely to visit a new national park in the Wolf Lake area. It starts with a description of salient features of the visitors currently visiting the Teslin and Watson Lake regions.

Current Regional Visitor Market Features

The following table (Table 7) presents a summary of key visitor market features for 1994 and 1999 for the tourism regions of Teslin and Watson Lake, as reported in the Yukon Visitor Exit Surveys.

Table 7 Current Market Features from Yukon Visitor Exit Surveys in 1994 and 1999		
Market Feature	Visitor Exit Survey Year	
	1994	1999
Number of Visitors Teslin Watson Lake	4620970960	4573063520
Number of Parties Teslin Watson Lake	1744727908	2120027251
Average Party Size Teslin Watson Lake	2.6 2.5	2.1 2.3

Table 8 describes some of the visitor market characteristics from the latest Yukon Visitor Exit Survey¹ (1999) for Teslin and Watson Lake. The data in this table does not paint a very rosy picture of tourism in these areas.

¹ There was a Visitor Exit Survey in 2004 but the results of this survey were still in process at the time of writing this report.

Table 8 Current Market Features from 1999 Yukon Visitor Exit Survey	
Market Feature	1999 Results
Length of Stay - Less than 1 Night Teslin Watson Lake	70% 43%
Length of Stay - 1 to 2 Nights Teslin Watson Lake	29% 56%
Percent of Total Visitor Spending In Yukon Teslin Watson Lake	3% 7%
Average Spending per Party in Region Teslin Watson Lake	\$45 \$129
Average Spending per Person per Night in Region Teslin Watson Lake	\$22 \$57
Percent of Parties Planning to Visit the Region Teslin Watson Lake	72% 73%

The 1999 Visitor Exit Survey also revealed that the Teslin and Watson Lake regions are not prime destinations for the majority of visitors: visitors generally are simply passing through. These two regions ranked lowest in the identification by visitors of territorial regions they planned to visit on this trip. Further, the regions experience the lowest visitor spending within the territory, and only one (1) percent of visitors stay more than two nights in either of these regions.

Clearly, if tourism activity is to increase in the area, any development which would attract visitors and extend their stay in the region would be of benefit to the regions. A new national park would lead to improvements in area infrastructure as well as tourism services.

Visitor Segments

It is believed there will be two main sources of visitors to a new park: 1) Alaska Highway Drive-By; and 2) New Destination visitors. A third group - the Area Residents (i.e. those living in the

immediate area of the proposed park) - could be considered but the use of the park area by these individuals is not expected to change substantially, and they are therefore not part of our market analysis.

Since the main features and attractions of the new park would be centred at Wolf Lake, which may be some distance away from the Alaska Highway, depending on how park boundaries are drawn, visitors to the park services and facilities located in proximity to the highway could be experiencing very few of the park's assets. The visitor market is therefore broken down between those who enjoy the facilities and services along the highway (Alaska Highway Drive-By) and those who go into the back-country and enjoy the park's major attributes (Destination visitors).

The Highway Drive-By visitors are those on a trip along the Alaska Highway and who come across the new park facilities and services as part of that extended trip. Depending on the facilities available, they will likely visit the interpretive centre, use the campground (if there is one) or day-use area, and enjoy a short trail hike. The numbers of these visitors can be estimated on the basis of highway statistics.

The new Destination visitors are those who visit the new park because it is a new Canadian national park. Generally these visitors are familiar with the national parks system and will often plan trips around the existence of these parks. It can be assumed that they will be interested to visit a newly established national park, to experience its features and attributes which have warranted its designation as a national park. For these visitors, a new park would clearly be a main destination in itself, or one of several similar destinations. In either case, the distinguishing feature of this visitor type is the purposefulness of the visit to the park. The Wolf River is already a popular whitewater canoe route; it is reasonable, therefore, to expect that the visit will include use of the back-country for canoeing and boating, hiking, camping, wildlife viewing and other nature- or culture-based outdoor activities. It will also include fly-in and either commercially guided or self-guided water-based activities on and around Wolf Lake. The numbers of these destination visitors is more difficult to estimate. Although visitor origin is not a concern for this analysis, it is expected that residents of Whitehorse will form a sizable annual component of the destination visitor market.

1. Alaska Highway Drive-By Visitors

Detailed traffic counter information was used to estimate the number of visitors driving through the region. Six years' of data were used in these calculations. Several traffic counter data from the Alaska Highway were used as well as a counter on the Cassiar highway. Table 9 contains the Average Summer Daily Traffic for selected points on the Alaska Highway for the period 1998 - 2003.

Table 10 contains the Average Daily Traffic for the same selected points on the Alaska Highway for the same year period. This annual traffic data is required in order to determine what the summer increment in traffic might be.

Table 9 Average Summer Daily Traffic (ASDT), Selected Traffic Counters in Study Area								
Counter Location	Year						Trend	Average
	1998	1999	2000	2001	2002	2003		
(AH) E. of Jakes Corners	985	943	925	921	939	915	↘	938
(AH) Km. 1059	941	653	866	n.a.	822	n.a.	↘	821
(AH) W. of Cassiar Highway	944	1138	749	n.a.	n.a.	n.a.	?	944
(AH) E. of Cassiar Highway	na	1321	952	n.a.	n.a.	n.a.	?	-1137
(AH) Watson Lake	na	951	981	919	928	902	↘	936
Cassiar Highway	321	358	n.a.	n.a.	n.a.	n.a.	?	-340
AH - Alaska Highway n.a. - not available Numbers in brackets indicate insufficient data to estimate a reliable average “?” Indicates insufficient data to estimate a trend Source: YTG, Department of Highways and Public Works, <u>2003 Traffic Count Summary</u> . June, 2004.								

Table 10 Average Daily Traffic (ADT), Selected Traffic Counters in Study Area								
Counter Location	Year						Trend	Average
	1998	1999	2000	2001	2002	2003		
(AH) E. of Jakes Corners	595	582	650	607	602	590	↔	604
(AH) Km. 1059	546	352	579	273	578	n.a.	?	466
(AH) W. of Cassiar Highway	564	666	533	n.a.	n.a.	n.a.	?	-588
(AH) E. of Cassiar Highway	377	554	622	n.a.	n.a.	n.a.	↗	-518
(AH) Watson Lake	655	640	677	633	615	591	↘	635
Cassiar Highway	207	238	237	n.a.	n.a.	n.a.	?	-227
AH - Alaska Highway n.a. - not available Numbers in brackets indicate insufficient data to estimate a reliable average “?” Indicates insufficient data to estimate a trend Source: <i>ibid.</i>								

The difference between ASDT and ADT represents summer or additional tourism/transient traffic. These differences for each location are presented in Table 11.

<p style="text-align: center;">Table 11 Differences between ASDT and ADT at Selected Traffic Counters in Study Area</p>								
Counter Location	Year						Trend	Average
	1998	1999	2000	2001	2002	2003		
(AH) E. of Jakes Corners	390	361	275	314	337	325	↘	334
(AH) Km. 1059	395	301	287	n.a.	244	n.a.	↘	307
(AH) W. of Cassiar Highway	380	472	216	n.a.	n.a.	n.a.	?	356
(AH) E. of Cassiar Highway	n.a.	767	330	n.a.	n.a.	n.a.	?	-549
(AH) Watson Lake	n.a.	311	304	286	313	311	↔	305
Cassiar Highway	114	120	n.a.	n.a.	n.a.	n.a.	?	-117
<p>AH - Alaska Highway n.a. - not available Numbers in brackets indicate insufficient data to estimate a reliable average “?” Indicates insufficient data to estimate trend</p>								

Taking the average difference for each location for this period, and creating an overall average for all locations, it is found that the average difference is 328 vehicles per day. If the two averages with unreliable estimates are excluded (bracketed figures in the table), the average changes to 326 vehicles per day - not a significant change.

From these figures it appears likely that the summer tourist traffic can be estimated at a fairly stable 328 vehicles per day in the region of the proposed park. This represents traffic in both directions on the highway and needs to be adjusted to reflect the number of same visitor parties who travel both ways on the highway. It is unlikely that a tourist party would visit the same national park twice on the same trip; it is much more likely that the park might be visited once only. The simplest adjustment would be to take half the traffic count as the potential visitor population, but this could lead to an under-representation of the possible number of visitors since at least some travellers will be on a one-way trip (or a trip whose route will pass this way only once). In addition, some of the increased summer traffic will be commercial traffic supplying the

territory and Alaska. This commercial traffic will be assumed to be 10% of the vehicles². Making the necessary adjustments, therefore, it will be assumed that 60% of the remaining traffic count reflects a unique potential visitor market and that has the potential to become park visitors. Applying these assumptions, the number of vehicles that would likely form the base market for the park is estimated at approximately 175 vehicles per day. This represents an assumed 175 potential visitor parties per day during the summer months (May 1 - Sept 30) or a total of 153 days. The existing drive-by potential market is therefore estimated at 26,775 visitor parties.

Given that the 1999 Yukon Visitor Exit Survey found that the average party size in Teslin was 2.1 persons and 2.3 in Watson lake, the number of people represented by the 26,775 visitor parties is estimated to be approximately 58,000 visitors. Based on the number of visitors in each of these two tourism regions (Teslin - 45,730 and Watson Lake - 63,520; Table 7) in 1999, this estimate of potential drive-by visitors appears reasonable and defensible.

In summary, the potential drive-by market for a new national park in the Teslin-Watson Lake corridor is estimated at 58,000 visitors. Clearly, not all these travellers will stop and visit the park. Depending on the proximity and accessibility of a new park and/or its visitor reception centre to the Alaska Highway, the numbers of visitors making a short stop could be quite large. However, if the park and/or visitor reception centre has limited or no access from the Highway, then the numbers of visitors is likely to be quite small. The configuration of the park, therefore, has an important bearing on the number of potential visitors it may attract. For maximum visits, the park should be accessible to travellers on the Alaska Highway.

For the purposes of this study it has been assumed that there will be a park headquarters office and visitor reception centre (VRC) located in the Teslin area that will be immediately accessible from the Alaska Highway. The majority of the park resources will not be accessible from the highway but the VRC will provide information to visitors on the park and alternative means of gaining access to the interior.

Visitors who stop at the VRC will be short term visitors; the facility will function as an informative rest area that will attract visitors. There are no easy or certain ways of predicting the percentage of the drive-by tourist market who will stop at the VRC and become park visitors. To be conservative, for the purposes of this study, it will be assumed that 25% of the drive-by market will stop. This translates into 14,500 visitors during the May to September period. The following annual estimates show how this number of visitors may be achieved over the first ten-year period of park establishment. It should be noted that the percentage of visitors assumed by this study is believed to be a minimum value and that a higher percentage³ could possibly be expected.

² Alaska Highway statistics indicate commercial transport vehicles as 5.5% of total traffic during their sampling period.

³ For example, a higher percentage of visitors to the Kluane region visit Kluane NPR.

Estimated Drive-By Visitors Per Year for First Ten Years of Park Establishment	
Year 1	-
Year 2	-
Year 3	5000
Year 4	7500
Year 5	12500
Year 6	14500
Year 7	14500
Year 8	14500
Year 9	14500
Year 10	14500
Ten Year Total	97500
Note: Year 1 and 2 have no visitors because there are no facilities available.	



Boating in the Nisutlin Delta near Teslin, Yukon

2. Destination Visitors

The number of new Destination visitors to the park is also difficult to estimate. Since it is a new park and a new outdoor recreation experience, there are no past data for this area on which to base any forecasts. However, the levels of use of other isolated national parks, such as Nahanni, may give some indication of the numbers of new destination visitors that might be expected once the park is established. Data exist on the numbers of travellers to Kluane NPR (44% in 2002) who had the park

as their main destination⁴. However, since many of Kluane's visitor services are readily accessible from the Alaska Highway, it cannot be viewed as comparable to the Wolf Lake situation; Nahanni NPR in NWT, Wood Buffalo NP in NWT/Alberta, and/or Ivvavik NP in Yukon provide much more appropriate comparisons. Visitor numbers at these three national parks for each of the years 1994 - 2000 are summarized in Table 12.

Table 12 Summary of Visitor Numbers to Nahanni, Wood Buffalo and Ivvavik National Parks, 1994 - 2000			
Year	Nahanni	Wood Buffalo	Ivvavik
1994	3095	6231	167
1995	4551	6444	254
1996	4605	6040	141
1997	768	5753	253
1998	1,526*	4066	210
1999	7281	n.a.	128
2000	6918	n.a.	155
Average	4106	5707	187
* Parks Canada has published two visitor numbers for this year: 1,526 and 6,410.			

Nahanni shows significant variation in the number of visitors from year to year, whereas Ivvavik NPR is reasonably consistently within a range of 130 - 250 visitors per year. However, the levels of visitor numbers is substantially different between these two parks. With Nahanni designated a World Heritage Site and internationally renowned for its spectacular scenery, it is reasonable to expect it to attract a larger number of visitors than a new national park at Wolf Lake. Ivvavik NPR is a very remote park in northern Yukon and not well known. Visitors must make a significant effort to visit this park. Wood Buffalo is something of an anomaly because it is

⁴ See an untitled report on Kluane National Park in Word file by Simon Fraser University, July 2004.

accessible by vehicle from Fort Smith. Because of this, these visitor numbers will not be used.

For the purposes of this study it will be assumed that the number of new destination visitors to Wolf Lake could be mid-way between Ivvavik NPR (187) and Nahanni NPR (4,106) - that is, 2,150 visitors per year - when the park is established. This number will depend on many factors, including the ability of local entrepreneurs to provide outfitting, guiding and other services to these visitors. It is believed this number is reasonable, while being fairly conservative. As the park becomes better known and visitor services become more readily available for interior visits and recreational activities, the number of visitors could grow, depending on the visitor management plan and the desire to maintain ecological integrity. It is difficult to anticipate the speed at which such growth may occur, and a conservative approach at this point should not raise unrealistic expectations.

It is expected that the numbers of destination visitors will develop over the first ten year period in the following gradual manner:

Estimated Destination Visitors Per Year for First Ten Years of Park Establishment	
Year 1	200
Year 2	400
Year 3	600
Year 4	800
Year 5	1000
Year 6	1200
Year 7	1400
Year 8	1600
Year 9	1800
Year 10	2150
Ten Year Total	11150

3. Summary of Forecast Visitor Numbers

Combining the two estimates of visitor numbers produces an annual summary of projected visitors to a new Wolf Lake national park (Table 13). It should be noted that the number of visitors will also depend upon the marketing and promotion the park gets from Parks Canada, Yukon tourism and other tourism businesses. Because of this variable, the number of visitors will likely vary from year to year.

Table 13 Estimated Total Visitors Per Year for First Ten Years of Park Establishment			
Year	Drive-By	Destination	Total Visitors
Year 1	-	200	200
Year 2	-	400	400
Year 3	5000	600	5600
Year 4	7500	800	8300
Year 5	12500	1000	13500
Year 6	14500	1200	15700
Year 7	14500	1400	15900
Year 8	14500	1600	16100
Year 9	14500	1800	16300
Year 10	14500	2150	16650
Ten Year Total	97500	11150	108650

Forecast: Visitor Spending

This section details the steps used to derive estimates of total visitor spending which can be attributed to the new national park. As with the visitor numbers, spending estimates are generated for each of the visitor segments - Drive-By and Destination.

Drive-By Visitor Spending

Tables 7 and 8 contained some information on visitor spending in 1999 that can be used in the derivation of an estimate for the spending by drive-by visitor market segment. In particular, the following was reported for each of the two tourist regions concerned:

	<u>Teslin region</u>	<u>Watson Lake region</u>
Average party size	2.1	2.3
Average spending/party	\$45	\$57

Based on these results, the average spending per person in Teslin was \$21.43 and in the Watson Lake region, it was \$24.78. The combined average for these two locations is \$23.11. Given that the vast majority of visitors to these two regions do not spend much time in the region - less than one night - the spending per person will also be considered as spending per person per day in these regions.

For those travellers who stop to visit the new national park, this study will attribute one-third (1/3) of individual average daily spending (1/3 of \$23.11 = \$7.70) to the park visit. This amount will constitute new spending occurring in the Teslin region because of the new national park, and will be used as the total spending per person per day for visitors to the new national park.

It should be noted that this value is an underestimate; at present there are few establishments in the Teslin area where goods and services can be acquired by the travelling public (Tables 1 - 4). As the availability of such goods and services increases, the amount spent in the region will also rise. It is anticipated that some expansion in goods and service availability may occur towards the end of the first ten years of park establishment; most expansion, however, will occur in subsequent years.

This value is also an underestimate for another reason: the amounts have not been adjusted for inflation during the 1999 - 2004 period. While this would bring the value from 1999 to its equivalent in 2004, this analysis is tending to indicate a minimum value that is likely to be achieved, and so it has not been adjusted. In addition, since it is not known when, or if, a new park would be established, any adjustment should be made to the year of new park establishment.

Combining this spending information with our estimates of drive-by visitor numbers per year, produces an estimate of annual visitor spending for this visitor segment. This minimal estimate, totalling \$750,000 over ten years, is presented in Table 14.

<p style="text-align: center;">Table 14 Estimated Total Spending by Drive-By Visitors Per Year for First Ten Years of Park Establishment (Constant Dollars)</p>	
Year 1	-
Year 2	-
Year 3	\$38,500
Year 4	\$57,750
Year 5	\$96,250
Year 6	\$111,650
Year 7	\$111,650
Year 8	\$111,650
Year 9	\$111,650
Year 10	\$111,650
Ten Year Total	\$750,750

The next challenge is to estimate the spending by expenditure categories. To accomplish this, other results from the 1999 Visitor Exit Survey are used. In particular, the percentage breakdown between the expenditure categories of spending by Yukon visitors:

Transportation	37.39%	Accommodation	28.75%
Groceries/Alcohol	11.48%	Restaurants	11.97%
Recreation/Entertainment	5.79%	Other Spending	4.62%

By applying these percentages to the total annual spending estimates, it is possible to derive more detailed expenditure estimates that will in turn be used to estimate economic impacts.

Destination Visitor Spending

The spending amounts and patterns of the destination visitor are somewhat more difficult to predict. As park visitors, these people will likely be on a guided or self-guided trip into the park. Some will concentrate their activities on the lake and others will go down the Wolf River or possibly the Liard River. In most cases the chartering of a float plane will be the means of access to the interior, and some will require equipment rentals, camping supplies and other goods to support their trip. In other words, the spending pattern of the destination visitor will be substantially different from that of the drive-by visitor. In addition, the destination visitor will likely be on a trip in the park of a week or more, compared to a short (several hour) visit by drive-by visitors.

Information from Nahanni NPR might have provided some insights into the spending of these visitors, but unfortunately, there is no current information available on visitor spending. However, a 1995 study⁵ of northern parks and reserves does include some spending estimates for 1992/93. This study reported the following estimates of spending per person:

Day users	\$200 per trip
Self-outfitters	\$1,250 per trip
Commercial outfitters	\$2,500 per trip

Applying the seasonally adjusted tourism expenditure index (1.174) to bring these 1992 dollars to 1999 (to be consistent with the drive-by visitor spending) and rounding them, the spending per person is more likely to be as follows:

Day users	\$250 per trip
Self-outfitters	\$1,500 per trip
Commercial outfitters	\$3,000 per trip

The 1995 study also reported that 44% of Nahanni NPR visitors were on day trips with the remaining 56% on overnight trips. The study estimated that half of the overnight visitors were on self-outfitted trips (28%) and half were with commercial outfitters (28%). Assuming these proportions would apply to the Wolf Lake situation, and that the spending levels would be approximately those adjusted figures above, then total spending estimates can be generated. This total spending by destination visitors to Wolf Lake is estimated to be approximately \$15 million. This amount is forecast to be spent in the following way, when combined with the estimates of visitor numbers:

⁵ Visit Profile and Economic Impact Statement: Northern National Parks (Reserves) and Historic Sites, prepared for Department of Canadian Heritage by P.G. Whiting and Associates and Strategic Research and Analysis. May 1995.

<p style="text-align: center;">Table 15 Estimated Annual Spending by Destination Visitors Per Year for First Ten Years of Park Establishment in Constant Dollars</p>	
Year 1	\$274,000
Year 2	\$548,000
Year 3	\$822,000
Year 4	\$1,096,000
Year 5	\$1,370,000
Year 6	\$1,644,000
Year 7	\$1,918,000
Year 8	\$2,192,000
Year 9	\$2,466,000
Year 10	\$2,945,000
Ten Year Total	\$15,275,500

The same 1995 report provided estimates of the spending by expenditure categories for all national parks and historic sites in both Yukon and NWT. The classification is somewhat different than that used in the Yukon Visitor Exit Survey, but is the best available to reflect the spending patterns of this visitor segment. The averaged percentage breakdown between the expenditure categories were found to be as follows:

Transportation	41.8%	Accommodation & Food	26.1%
Recreation/Entertainment	12.1%	Other Spending	20.0%

Assuming these percentages apply to the total annual spending estimates derived above, more detailed expenditures can be estimated. It is these more detailed estimates that will be used to estimate economic impacts.

Summary of Visitor Spending Estimates

Table 16 summarizes the estimates of visitor spending that will be attributable to a new national park at Wolf Lake.

Table 16 Estimated Total Visitor Spending Per Year for First Ten Years of Park Establishment			
Year	Visitor Segment		Total Spending
	Drive-By	Destination	
Year 1	-	\$274,000	\$274,000
Year 2	-	\$548,000	\$548,000
Year 3	\$38,500	\$822,000	\$860,500
Year 4	\$57,750	\$1,096,000	\$1,153,750
Year 5	\$96,250	\$1,370,000	\$1,466,250
Year 6	\$111,650	\$1,644,000	\$1,755,650
Year 7	\$111,650	\$1,918,000	\$2,029,650
Year 8	\$111,650	\$2,192,000	\$2,303,650
Year 9	\$111,650	\$2,466,000	\$2,577,650
Year 10	\$111,650	\$2,945,000	\$3,056,650
Ten Year Total	\$750,750	\$15,275,000	\$16,025,750

Even using fairly conservative per person spending figures and conservative visitor numbers, the estimated spending by visitors is significant. These dollars spent in the local area of the new park will have an economic impact upon the tourist regions in which the park is situated as well as upon the whole territory. It can be expected that if visitors spend more time in the area then visitor spending will grow proportionately.

Table 11 describes the detailed spending forecasts based on the expenditure categories described earlier. It is this combined total information that will be used in the EIMPA to calculate the economic impacts.

Table 17 - Total Estimated Visitor Spending by Expenditure Category for Drive-by and Destination Visitor Segments During the First Ten Years of a Wolf Lake National Park

Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Total
Drive-by Visitors											
Transportation (auto)	-	-	14395	21593	35988	41746	41746	41746	41746	41746	280705
Transportation (other)	-	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Accommodation	-	-	11069	16603	27672	32099	32099	32099	32099	32099	215841
Food/Alcohol from Stores	-	-	4420	6630	11050	12817	12817	12817	12817	12817	86186
Food/Alcohol Restaurants	-	-	4608	6913	11521	13365	13365	13365	13365	13365	89865
Recreation/Entertainment	-	-	2229	3344	5573	6465	6465	6465	6465	6465	43468
Other Expenditures	-	-	1779	2668	4447	5158	5158	5158	5158	5158	34685
Sub-Total	-	-	38,500	57,750	96,250	111650	111650	111650	111650	111650	750750
Destination Visitors											
Transportation (auto)	45813	91626	137438	183251	229064	274877	320690	366502	412315	492404	2553980
Transportation (other)	68719	137438	206158	274877	343596	412315	481034	549754	618473	738606	3830970
Accommodation	35620	71240	106860	142480	178100	213720	249340	284960	320580	382850	1985750
Food/Alcohol from Stores	35894	71788	107682	143576	179470	215364	251258	287152	323046	385795	2001025
Food/Alcohol Restaurants	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Recreation/Entertainment	33,154	66,308	99,462	132,616	165,770	198,924	232,078	265,232	298,386	356,345	1848275
Other Expenditures	54800	109600	164400	219200	274000	328800	383600	438400	493200	589000	3055000
Sub-Total	274000	548000	822000	1096000	1370000	1644000	1918000	2192000	2466000	2945000	15275000

Table 17 - Total Estimated Visitor Spending by Expenditure Category for the First Ten Years of a Wolf Lake National Park (Continued)											
Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
All Visitors											
Transportation (auto)	45813	91626	151834	204844	265052	316623	362436	408248	454061	534150	2834685
Transportation (other)	68719	137438	206158	274877	343596	412315	481034	549754	618473	738606	3830970
Accommodation	35620	71240	117929	159083	205772	245819	281439	317059	352679	414949	2201591
Food/Alcohol from Stores	35894	71788	112102	150206	190520	228181	264075	299969	335863	398612	2087211
Food/Alcohol Restaurants	-	-	4608	6913	11521	13365	13365	13365	13365	13365	89865
Recreation/Entertainment	33154	66308	101691	135960	171343	205389	238543	271697	304851	362810	1891743
Other Expenditures	54800	109600	166179	221868	278447	333958	388758	443558	498358	594158	3089685
TOTAL	274,000	548,000	860,500	1,153,750	1,466,250	1,755,650	2,029,650	2,303,650	2,577,650	3,056,650	16,025,750

4. Jennings Lake Alternative



Jennings Lake ecosystem, BC

The Jennings Lake Alternative applies the same process and procedures as for the Wolf Lake area concerning the likely economic impacts associated with the possible new park development. The geographic area of concern now, however, is that part of Natural Region #7 in northern British Columbia just south of the Yukon - British Columbia boundary (See Map 1, page 3). Since it is not known what precise area might be selected as a new national park, for the purposes of this alternative it will be assumed that most facilities, services and park infrastructure will be located in British Columbia. Although access to the park could also be from Yukon (for example, Watson Lake could still function as a gateway community and businesses could develop in Teslin to access the area through the Jennings River), it is assumed for the purposes of this analysis that the new tourism

potential lies primarily within British Columbia.

Forecast: Parks Canada Expenditures Over 10 Years

The development of a new national park in the Jennings Lake area would not be substantially different from that already described for the Wolf Lake area. There may be a different configuration, but it is assumed that the same basic types of facilities would be developed and the same total budget would be spent. The orientation of this alternative would be towards Dease Lake and Good Hope Lake on the Cassiar Highway, rather than the communities on the Alaska Highway in Yukon (i.e. the focus of development would shift to northern B.C.). However, it is possible that Teslin, and especially Teslin Lake, could be important points of access into the Jennings Lake area.

Because of the essentially similar park development, we would foresee the new park exhibiting the following same characteristics:

- most facilities will be integrated into the local communities (Good Hope Lake and/or Dease Lake);
- the park will provide basic visitor services - information, interpretation, tourism services;
- the park will allow for and encourage commercial outfitter and guiding services;
- there will be a cooperative arrangement for the management of the park with local people;
- facility development in the park financed by Parks Canada will be relatively modest, and consist of:
 - headquarters office building with associated visitor centre and parking area
 - hiking trails
 - interpretive displays
 - park signage
 - warden cabin and accommodation for staff at Jennings Lake
 - remote group camping areas at Jennings Lake
 - boat and float plane docking facility at Jennings Lake.

Based on these characteristics and the hypothetical park development scenario already prepared for Wolf Lake, we will assume the same level, type and schedule of park development in the Jennings Lake area. Clearly, the park headquarters will not be in Teslin in this alternative; more likely Good Hope Lake. In addition, the remote camping and docking facilities would be located at Jennings Lake, rather than Wolf Lake, as indicated in Appendix 2. However, overall the spending level and pattern of Parks Canada Agency would remain largely the same as that depicted for Wolf Lake. As a consequence, the same spending estimates will be used to calculate economic impacts, but this time the economic impact multipliers will be those for British Columbia.

To refresh: the hypothetical park development scenario indicates that over the first ten years of park establishment: \$4.8 million will be spent on capital development; \$3.6 million on wages and salaries; and \$5.5 million on operations and management. Table 18 forecasts how these possible capital and operational expenditures might be spent. Table 19 summarizes the transformation of the annual values presented in Table 18 to model (EIMPA) categories for each year.

Table 18 - Hypothetical Development and Operations Scenario Developed by *The Outspan Group Inc.*
Possible Ten Year Expenditure Plan for Jennings Lake

Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
CAPITAL											
Visitor Reception Centre		500000	1500000	650000							2650000
Interpretive Wayside					60000						60000
Remote Camp, Jen. Lake	100000	120000									220000
Park Signage		50000	50000	75000							175000
Park Office, Jen. Lake	100000	140000									240000
Staff Resid. Ft. Good. Hope.	250000	250000									500000
Infrastructure Support				200000	200000	200000	200000	200000			1000000
Sub-Total	450,000	1,060,000	1,550,000	925,000	260,000	200000	200000	200000			4845000
OPERATIONS											
Wages and Salaries	150000	250000	320000	350000	380000	400000	415000	450000	450000	450000	3615000
Operations	400000	450000	500000	600000	300000	300000	175000	100000	100000	130000	3055000
Research	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	500000
Cooperative Management	75000	75000	75000	75000	75000	75000	75000	75000	75000	75000	750000
Planning & Design	100000	250000	200000	46500							596500
Sub-Total	775,000	1,075,000	1,145,000	1,121,500	805,000	825,000	715,000	675,000	675,000	705,000	9051500
Contingencies (\$63,850 added to each year)											638500
Total	1288850	2198850	2758850	2110350	1128850	1088850	978850	938850	738850	768850	14000000

Table 19 - Summary of Hypothetical Parks Canada Development and Operations Spending, By EIMPA Expenditure Category

Expenditure Category	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
CAPITAL											
Repairs											
Residential Construction	275,000	600,000	1,000,000	400,000	60,000						
Non-Residential Const.	70,000	215,000	50,000	75,000							
Access Roads/Parking		50,000	100,000	50,000							
Road/Parking Repair											
Other Engineering Const.	20,000	60,000	100,000								
Professional Services	85,000	55,000									
Exhibits/Furniture		10,000	300,000	200,000							
Other Expenditures		70,000		200,000	200,000	200,000	200,000	200,000			
Sub-Total	450,000	1,060,000	1,550,000	925,000	260,000	200,000	200,000	200,000			5,310,000
OPERATIONS											
Utilities	15,000	15,000	25,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	160,000
Printing & Publications	9,000	9,000	14,000	19,000	7,000	7,000	5,000	7,000	7,000	7,000	91,000
Presentations			5,000	10,000	30,000	15,000	10,000			10,000	80,000
Professional/Bus Services	190,000	335,000	305,000	192,500	105,000	115,000	75,000	95,000	85,000	85,000	1,582,500
Other Business Services		20,000	30,000	90,000	10,000	10,000	25,000			15,000	200,000
Travel	73,000	73,000	90,000	110,000	75,000	55,000	58,000	55,000	55,000	55,000	699,000
Other Expenditures	401,850	436,850	419,850	398,850	246,850	271,850	175,850	116,850	126,850	131,850	2,727,500
Sub-Total	688,850	888,850	888,850	835,350	488,850	488,850	363,850	288,850	288,850	318,850	5,540,000
Wages and Salaries	150,000	250,000	320,000	350,000	380,000	400,000	415,000	450,000	450,000	450,000	3615000
TOTAL	\$1,288,850	\$2,198,850	\$2,758,850	\$2,110,350	\$1,128,850	\$1,088,850	\$978,850	\$938,850	\$738,850	\$768,850	\$14,000,000

Forecast: Visitor Markets and Numbers

The number of visitors likely to visit a new national park in the Jennings Lake area uses the same approach as that applied to the Wolf Lake alternative.

Current Regional Visitor Market Features

The area north of Dease Lake, British Columbia, on the Cassiar highway is not a major tourism destination. There are relatively few facilities and services (see tourism inventory, Chapter 2) and the numbers of travellers to and through this region is small relative to other areas in B.C. The Cassiar highway falls mostly into the Northwest tourism region, although just before reaching the Yukon, it crosses into the Northeast tourism region. Provincial tourism data for the Northwest tourism region indicates that it accounts for only 7% of visitors and 5% of visitor spending in the province.

The following table (Table 20) presents a summary of key visit characteristics and market features for 1999 for the Northwest tourism region of B.C.

Table 20 Current Market Features from B.C. Visitor Data Reports 1999	
Market Feature	Northwest Region
Number of Visitors	
Non-resident	0.6 million
B.C. residents	1.6 million
Average Spending: person/day	
Non-resident	\$54
B.C. residents	\$54
Average Spending: person/stay	
Non-resident	\$234
B.C. residents	\$178
Average Party Size	
Non-resident	2.1
B.C. residents	2.7
Length of Stay in Region (days)	
Non-resident	4.4
B.C. residents	3.4

The 1999 data for the northwest region suggests that, similar to the Teslin and Watson Lake regions of Yukon, this region is not a prime destination for the majority of visitors to British Columbia. Also similar to the Teslin-Watson Lake regions, any development which would attract visitors and extend their stay in the region would be of benefit to the region. However, the scenic wilderness quality of this area of the province is viewed as a significant asset with large potential.

Visitor Segments

As for the Wolf Lake alternative, it is believed there will be two main sources of visitors to the new park: 1) Cassiar Highway Drive-By; and 2) New Destination visitors.

Since the main features and attractions of the new park are likely to be located, some distance away from the Cassiar Highway, visitors to the park services and facilities located in proximity to the highway will be experiencing very few of the park's attractions. The visitor market is therefore broken down between those who enjoy the facilities and services along the highway (Cassiar Highway Drive-By) and those who go into the back-country and enjoy the park's major attributes (Destination visitors).

The Highway Drive-By visitors are those on a trip that takes them along the Cassiar Highway and who come across the new park facilities and services as part of that extended trip. Depending on the facilities available, they will likely visit the visitor centre, use the campground (if there is one) or day-use area, and enjoy a short trail hike. The numbers of these visitors can be estimated on the basis of highway statistics.

The Destination visitors are those who visit the new park because it is a new Canadian national park. For these visitors, a new park would be a main destination in itself, or one of several similar destinations. In either case, the distinguishing feature of this visitor type is the purposefulness of the visit to the park. It is reasonable to expect that the visit will include use of the back-country for canoeing and boating, wildlife viewing, hiking, camping and other nature- and/or culture-based outdoor activities. It will also include fly-in and either commercially guided or self-guided water-based activities on and around Jennings Lake. Although visitor origin is not a concern for this analysis, it is expected that residents of Whitehorse will form a sizable annual component of the destination visitor market for the Jennings Lake alternative.

1. Cassiar Highway Drive-by Visitors

The available traffic counter information was used to estimate the number of visitors driving through the region. Traffic counter data from Dease Lake to the Yukon - B.C. border on the Cassiar Highway were used. This traffic counter data is summarized in the following table (Table 21).

Table 21 Average Summer Daily Traffic (ASDT), Selected Traffic Counters on the Cassiar Highway							
Counter Location	Year						Average
	1998	1999	2000	2001	2002	2003	
2.0 Km. North of Dease Lake	820	860	n.a.	n.a.	n.a.	n.a.	840
2.0 Km. South of Cassiar	750	880	n.a.	n.a.	n.a.	n.a.	815
0.1 Km. North of Cassiar	n.a.	n.a.	n.a.	420	n.a.	n.a.	420
Cassiar Highway in Yukon	321	358	n.a.	n.a.	n.a.	n.a.	340
n.a. - not available Source: Personal communication, Bill Maitland, B.C. Ministry of Transportation (December, 2004), and Yukon Territorial Government, Department of Highways and Public Works, <u>2003 Traffic Count Summary</u> . June, 2004.							

It is clear from the table that the volume of traffic declines substantially the further north the measurements are taken. However the amount of data available is quite small and should therefore be viewed with caution.

The ratio of summer traffic to annual average traffic for each of these traffic measure points was given by the B.C. Ministry of Transportation as follows:

2.0 Km. North of Dease Lake	1.29
2.0 Km. South of Cassiar	1.20
0.1 Km. North of Cassiar	1.11
Cassiar Highway in Yukon	1.35

These ratios suggest that there is greater summer traffic in the Dease Lake area and in the Yukon on the Cassiar Highway than there is in the area between these locations. Based on these ratios and the average traffic figures presented in Table 21, the summer traffic for each of these locations is estimated as follows:

2.0 Km. North of Dease Lake	244
2.0 Km. South of Cassiar	163
0.1 Km. North of Cassiar	46
Cassiar Highway in Yukon	119

The average summer traffic for the area around Jennings Lake, using only the latter three

locations (i.e. excluding the Dease Lake value), is 109 vehicles per day. The Dease Lake traffic is substantially different from the other locations and reflects traffic to/from a more urban service centre in a northern setting and is not believed to reflect summer visitor traffic north of that centre. However, since the location of a national park in this area could lead to higher traffic volumes, an additional 10% will be added to this base estimate as the estimate of summer visitor traffic. The average summer daily visitor traffic is therefore estimated to be 120 vehicles per day.

This number needs to be adjusted to reflect two-way traffic on the highway, since it is unlikely that a tourist party would visit the same national park twice on the same trip. An adjustment should be made to this base to reflect the real potential market volume. In addition, some of the increased summer traffic will be commercial traffic supplying local communities in B.C. and the territory. This commercial traffic will be assumed to be 10% of the vehicles. Making the necessary adjustments, therefore, it will be assumed that 60% of the remaining traffic count reflects a unique potential visitor market and that has the potential to become park visitors. Applying these assumptions, the number of vehicles that would likely form the base market for the park is estimated at approximately 65 vehicles per day. This represents an assumed 65 potential visitor parties per day during the summer months (May 1 - Sept 30) or a total of 153 days. The existing drive-by potential market is therefore estimated at 9,945 visitor parties.

Based on the results of the 1999 B.C. Visitor Survey, the average party size was 2.5 persons. The number of people represented by the 9,945 visitor parties is estimated to be approximately 24,800 visitors.

In summary, the potential drive-by market for a possible new national park in the Jennings Lake area is estimated at 24,800 visitors. Clearly, not all these travellers to the area will stop and visit the park. Depending on the proximity and accessibility of a new park to the Cassiar Highway, the numbers of visitors making a short stop could be quite large. However, if the park has limited or no access from the Highway, then the numbers of visitors is likely to be quite small. The configuration of the park, therefore, has an important bearing on the number of potential visitors it may attract. For maximum visits, the park should be accessible to travellers on the Cassiar Highway.

For the purposes of this study it has been assumed that there will be a park headquarters office and visitor reception centre (VRC) located in the Good Hope Lake area that will be immediately accessible from the Cassiar Highway. However, the majority of the park resources will not be accessible from the highway but the VRC will provide information to visitors on the park and alternative means of gaining access to the interior. In addition, with few facilities or services available in the Good Hope Lake area, it may take some time before there are sufficient visitor services. It is possible that Dease Lake could be the regional service centre for a new park; it has more visitor facilities and services but it would be a further distance from the park site.

Visitors who stop at the VRC will be short stay visitors; the facility will function as an informative rest area that will attract visitors. With few facilities/services on the Cassiar Highway and no easy access to the park's interior, there will be little incentive for the number of these visitors to

increase, as a result, the summer highway traffic provides a good indication of the total potential visitor market. It will be assumed that the same percentage of the drive-by tourist market will stop at the VRC as was used for Wolf Lake - 25% of the drive-by market. This translates into 6,200 visitors during the May to September period. The following annual estimates show how this number of visitors may be achieved over the first ten-year period of park establishment.

Estimated Drive-By Visitors Per Year for First Ten Years of Park Establishment	
Year 1	-
Year 2	-
Year 3	1800
Year 4	3000
Year 5	4500
Year 6	6200
Year 7	6200
Year 8	6200
Year 9	6200
Year 10	6200
Ten Year Total	41300
Note: Years 1 & 2 have no visitors since there are no facilities available.	

2. Destination Visitors

The reasoning used to estimate the number of destination visitors at Wolf Lake holds true for Jennings Lake as well. It is believed the same number of destination visitors can be used for this alternative. These visitor numbers over the first ten years of park establishment are estimated to be as follows:

Estimated Destination Visitors Per Year for First Ten Years of Park Establishment	
Year 1	200
Year 2	400
Year 3	600
Year 4	800
Year 5	1000
Year 6	1200
Year 7	1400
Year 8	1600
Year 9	1800
Year 10	2150
Ten Year Total	11150

3. Summary of Forecast Visitor Numbers

Combining the two estimates of visitor numbers produces an annual summary of forecast visitors to the possible new national park in the Jennings Lake area (Table 22).

Table 22 Estimated Total Visitors Per Year for First Ten Years of Park Establishment			
Year	Drive-By	Destination	Total Visitors
Year 1	-	200	200
Year 2	-	400	400
Year 3	1800	600	2400
Year 4	3000	800	3800
Year 5	4500	1000	5500
Year 6	6200	1200	7400
Year 7	6200	1400	7600
Year 8	6200	1600	7800
Year 9	6200	1800	8000
Year 10	6200	2150	8350
Ten Year Total	41300	11150	52450

Forecast: Visitor Spending

This section details the steps used to derive estimates of total visitor spending which can be attributed to the new national park. As with the visitor numbers, spending estimates are generated for each of the visitor segments - Drive-By and Destination.

Drive-By Visitor Spending

Table 20 contained some information on visitor spending in 1999 that can be used in the derivation of an estimate for the spending by drive-by visitor market segment. It was reported for this tourist region that the average daily spending by both non-residents and B.C. residents was \$54. Similar to the approach used for Wolf Lake, it will be assumed that for those travellers who stop to visit the new national park, this study will attribute one-third (1/3) of individual average daily spending (1/3 of \$54.00= \$18.00) to the park visit. This amount will constitute new

spending occurring in the Good Hope Lake area of the Northwest region because of the new national park, and will be used as the total spending per person per day for visitors to the possible new national park.

It should be noted that this value is an underestimate; at present there are few establishments in the Good Hope Lake area where goods and services can be acquired by the travelling public (see tourism inventory - chapter 2). As the availability of such goods and services increases, the amount spent in the region will also rise. It is anticipated that some expansion in goods and service availability may occur towards the end of the first ten years of park establishment; most expansion, however, will occur in subsequent years when the park is established and visitor markets have become more stable.

Combining this spending information with our estimates of drive-by visitor numbers per year, produces an estimate of annual visitor spending for this visitor segment. This minimal estimate, totalling \$725,400 over ten years, is presented in Table 23.

Table 23 Estimated Total Spending by Drive-By Visitors Per Year for First Ten Years of Park Establishment (Constant Dollars)	
Year 1	-
Year 2	-
Year 3	\$32,400
Year 4	\$54,000
Year 5	\$81,000
Year 6	\$111,600
Year 7	\$111,600
Year 8	\$111,600
Year 9	\$111,600
Year 10	\$111,600
Ten Year Total	\$725,400

This spending is broken down by expenditure categories based on results of the 1999 Visitor Survey. The percentage breakdown between the expenditure categories based on survey results is as follows:

Transportation	18.4%	Accommodation	15.4%
Food and Beverage	23.4%	Recreation/Entertainment	6.6%
Other Spending	36.2%		

By applying these percentages to the total annual spending estimates, it is possible to derive more detailed expenditure estimates that will in turn be used to estimate economic impacts.

Destination Visitor Spending

The number of destination visitors remains the same as in the Wolf Lake alternative; it is also believed their spending will remain at the level predicted for Wolf Lake. Since the dynamics of their trip into the park will remain much the same, there is little rationale for assuming a different spending level or pattern. As a result, the estimated spending per person remains as follows:

Day users	\$250 per trip
Self-outfitters	\$1,500 per trip
Commercial outfitters	\$3,000 per trip

Using the same proportions of day-use (44%), self-outfitting (28%), and commercial outfitting (28%) as for Wolf Lake, the total spending estimate for this visitor group in the first ten years at Jennings Lake is predicted to as shown in Table 24.

There is very little data available on the spending levels and patterns of B.C. back-country travellers. Unfortunately, a recent study⁶ on the economic value of the commercial nature-based tourism industry in B.C. contained no detailed information on this spending. Similarly, earlier reports on the economic impact and value of B.C.'s parks⁷ contain very limited data on visitor spending. As a consequence and because of their relative proximity, the same data as used for the Wolf Lake alternative will be used for the Jennings Lake alternative. The average percentage breakdown between the expenditure categories were found to be as follows:

⁶ *Economic Value of the Commercial Nature-Based Tourism Industry in British Columbia*, by Pacific Analytics in cooperation with Wilderness Tourism Association, for Tourism British Columbia. September 2004.

⁷ *Current and Future Economic Benefits of British Columbia Parks*, by Coopers and Lybrand Consulting for British Columbia Ministry of Environment, Lands and Parks. April 1996.

<p>Table 24 Estimated Annual Spending by Destination Visitors Per Year for First Ten Years of Park Establishment in Constant Dollars</p>	
Year 1	\$274,000
Year 2	\$548,000
Year 3	\$822,000
Year 4	\$1,096,000
Year 5	\$1,370,000
Year 6	\$1,644,000
Year 7	\$1,918,000
Year 8	\$2,192,000
Year 9	\$2,466,000
Year 10	\$2,945,000
Ten Year Total	\$15,275,500

Transportation	41.8%	Accommodation & Food	26.1%
Recreation/Entertainment	12.1%	Other Spending	20.0%

Assuming these percentages apply to the total annual spending estimates derived above, more detailed expenditures can be estimated. It is these more detailed estimates that will be used to estimate economic impacts.

Summary of Visitor Spending Estimates

Table 25 summarizes the estimates of visitor spending that could be attributable to a new national park in the Jennings Lake area.

Table 25 Estimated Total Visitor Spending Per Year for First Ten Years of Park Establishment			
Year	Visitor Segment		Total Spending
	Drive-By	Destination	
Year 1	-	\$274,000	\$274,000
Year 2	-	\$548,000	\$548,000
Year 3	\$32,400	\$822,000	\$854,400
Year 4	\$54,000	\$1,096,000	\$1,150,000
Year 5	\$81,000	\$1,370,000	\$1,451,000
Year 6	\$111,600	\$1,644,000	\$1,755,600
Year 7	\$111,600	\$1,918,000	\$2,029,600
Year 8	\$111,600	\$2,192,000	\$2,303,600
Year 9	\$111,600	\$2,466,000	\$2,577,600
Year 10	\$111,600	\$2,945,000	\$3,056,600
Ten Year Total	\$725,400	\$15,275,500	\$16,000,900

Even using fairly conservative per person spending figures and conservative visitor numbers, the estimated spending by visitors is significant. These dollars spent in the local area of the new park will have an economic impact upon the tourist regions in which the park is situated as well as upon the whole territory.

Table 26 describes the detailed spending forecasts based on the expenditure categories described earlier. It is this combined total information that will be used in the EIMPA to calculate the economic impacts.

Table 26 - Total Estimated Visitor Spending by Expenditure Category for Drive-by and Destination Visitor Segments During the First Ten Years of a New National Park in the Jennings Lake Area

Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Total
Drive-by Visitors											
Transportation (auto)	-	-	5962	9936	14904	20534	20534	20534	20534	20534	133474
Accommodation	-	-	4990	8316	12474	17186	17186	17186	17186	17186	111712
Food/Alcohol Restaurants	-	-	7582	12636	18954	26114	26114	26114	26114	26114	169744
Recreation/Entertainment	-	-	2138	3564	5346	7366	7366	7366	7366	7366	47876
Other Expenditures	-	-	11729	19548	29322	40399	40399	40399	40399	40399	262595
Sub-Total	-	-	32,400	54,000	81,000	111600	111600	111600	111600	111600	725400
Destination Visitors											
Transportation (auto)	114532	229064	343596	458128	572660	687192	801724	916256	1030788	1231010	6384950
Accommodation	35620	71240	106860	142480	178100	213720	249340	284960	320580	382850	1985750
Food/Alcohol Restaurants	35894	71788	107682	143576	179470	215364	251258	287152	323046	385795	2001025
Recreation/Entertainment	33,154	66,308	99,462	132,616	165,770	198,924	232,078	265,232	298,386	356,345	1848275
Other Expenditures	54800	109600	164400	219200	274000	328800	383600	438400	493200	589000	3055000
Sub-Total	274000	548000	822000	1096000	1370000	1644000	1918000	2192000	2466000	2945000	15275000

Table 26 - Total Estimated Visitor Spending by Expenditure Category for the First Ten Years of a New National Park in the Jennings Lake Area
(Continued)

Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
All Visitors											
Transportation (auto)	114532	229064	349558	468064	587564	707726	822258	936790	1051322	1251544	6518424
Accommodation	35620	71240	111850	150796	190574	230906	266526	302146	337766	400036	2097462
Food/Alcohol Restaurants	35894	71788	115264	156212	198424	241478	277372	313266	349160	411909	2170769
Recreation/Entertainment	33154	66308	101600	136180	171116	206290	239444	272598	305752	363711	1896151
Other Expenditures	54800	109600	176129	238748	303322	369199	423999	478799	533599	629399	3317595
TOTAL	274,000	548,000	854,400	1,150,000	1,451,000	1,755,600	2,029,600	2,303,600	2,577,600	3,056,600	16,000,400

5. Forecast Economic Impacts

The economic impact analysis was conducted using a software package entitled: Economic Impact Model for Parks and Protected Areas (EIMPA). This package was recently updated by *The Outspan Group Inc.* for the Department of Canadian Heritage, the Canadian Tourism Commission and the Canadian Parks Council. The results produced by this model are considered very conservative and should be considered as the **minimum impacts** that can be expected.

The data entered into the model to estimate the economic impacts was that presented in Tables 6 and 11 for the Wolf Lake alternative, and Tables 19 and 26 for the Jennings Lake alternative. The impacts are reported here on those associated with visitor spending by year, those associated with Parks Canada spending each year, and total annual impacts of both spending.

It is important to recall that the park scenario developed for this report may not be the one finally agreed upon with residents of the local area. However, it is important to know that any spending creates an impact, and even though the final configuration of the park may not be precisely as suggested in this report, the economic impacts associated with the level of spending identified will be of approximately the same magnitude.

Impacts occur within defined areas. In this study two different areas are used to estimate economic impacts associated with the projected spending of Parks Canada and forecast numbers of visitors: Teslin - Watson Lake Area and the Yukon Territory for the Wolf Lake alternative, and Good Hope Lake and British Columbia for the Jennings Lake alternative. A series of tables have been prepared summarizing the results of the impact analysis from: a) visitor spending impacts, b) Parks Canada spending impacts, and c) total spending impacts. These results are summarized in the following tables:

	<u>Visitor Spending</u>	<u>Parks Canada Spending</u>	<u>Total Spending</u>
Wolf Lake Alternative			
Local Area -	Table 27	Table 29	Table 31
Yukon Territory -	Table 28	Table 30	Table 32
Jennings Lake Alternative			
Local Area -	Table 34	Table 36	Table 38
British Columbia -	Table 35	Table 37	Table 39

Two summary tables are also included in the analysis of economic impacts - Tables 33 and 40.

Definitions of Impact Measures Used

The model estimates economic impacts using four measures.

Gross Domestic Product: Gross Domestic Product (GDP) includes labour income (as defined below) and the income of incorporated businesses (profits), net of taxes and subsidies on production. It actually represents the net value of production (or value added) retained within defined geographical boundaries from the activities being measured.

Labour Income: Labour Income includes worker's wages (amount of wages and salaries paid to individuals), supplementary labour income and the net income of unincorporated businesses.

Employment: Employment is measured in Full-time Equivalents (FTEs). One FTE equals one year of work for one person.

Tax Revenue: Tax revenue is derived from the tax on products (including GST, PST, manufacturers sales tax, harmonized sales tax, amusement taxes and excise taxes) and the tax on production (made up of property taxes, licences and permits). It does not include income tax.

The model calculates direct and indirect impacts, but not induced impacts. Direct impact is what results from direct spending. Indirect impact is what results from the re-spending by suppliers and their suppliers. (Induced impact is what results from re-spending of wages and salaries (household income) generated through all successive rounds of re-spending.) It is important to note that the measures of impact used are **extremely conservative**. The impacts are believed those that will actually be retained in the area of impact.

The model measures the direct, indirect and total impacts within the province or territory where the expenditure was made. In deriving estimates for the local area, only direct impacts are used in these calculations. Whereas, the estimates of economic impacts for the territory use both the direct and indirect impacts. This method of treating the impact estimates is believed appropriate and has been applied in other studies as the standard approach, especially for outlying areas where there is not a large and integrated economy.

Wolf Lake Economic Impacts

The following seven tables present the detailed estimates of economic impacts associated with the spending described in earlier chapters. A brief description of some of the key points is contained in the 'Notes' within each table.

Table 27
Visitor Spending Impacts in the Teslin - Watson Lake Area

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$274,000	\$62,190	\$49,220	1.8	N.A.
Year 2	\$548,000	\$124,380	\$98,440	3.5	N.A.
Year 3	\$860,500	\$191,619	\$151,733	5.4	N.A.
Year 4	\$1,153,750	\$256,333	\$202,989	7.2	N.A.
Year 5	\$1,466,250	\$323,572	\$256,281	9.1	N.A.
Year 6	\$1,755,650	\$387,781	\$307,130	11	N.A.
Year 7	\$2,029,650	\$449,971	\$356,350	12.7	N.A.
Year 8	\$2,303,650	\$512,161	\$405,570	14.5	N.A.
Year 9	\$2,577,650	\$574,351	\$454,790	16.2	N.A.
Year 10	\$3,056,650	\$683,070	\$540,836	19.3	N.A.
10-Year Cumulative Impact	\$16,025,750	\$3,565,428	\$2,823,339	100.7	N.A.

Notes:

1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.
2. These impacts are derived from the Direct Impacts only.
3. N.A. = not available.
4. Labour income comprises a large part of GDP from visitor spending, reflecting the high labour content in tourism products.
5. The GDP impact represents the expected amount of value added actually retained within the area.
6. GDP impacts are forecast to steadily increase from visitor spending, as this spending grows.

Table 28
Visitor Spending Impacts in the Yukon Territory

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$274,000	\$84,102	\$63,130	2.1	\$6,025
Year 2	\$548,000	\$168,203	\$126,259	4.1	\$12,050
Year 3	\$860,500	\$259,095	\$194,527	6.4	\$18,571
Year 4	\$1,153,750	\$346,591	\$260,226	8.5	\$24,845
Year 5	\$1,466,250	\$437,482	\$328,494	10.8	\$31,366
Year 6	\$1,755,650	\$524,299	\$393,679	12.9	\$37,590
Year 7	\$2,029,650	\$608,401	\$456,808	15	\$43,615
Year 8	\$2,303,650	\$692,503	\$519,938	17	\$49,639
Year 9	\$2,577,650	\$776,604	\$583,068	19.1	\$55,664
Year 10	\$3,056,650	\$923,629	\$693,430	22.7	\$66,197
10-Year Cumulative Impact	\$16,025,750	\$4,820,909	\$3,619,559	118.6	\$345,562

Notes:

1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.
2. These impacts are derived from the Direct and Indirect Impacts.
3. Labour income accounts for approximately 75% of GDP impacts.
4. The relatively small GDP impact (25%) associated with the spending reflects the need for the territory to import many visitor-oriented products and services.
5. As visitor spending grows in the territory so do all the measures of economic impact.

<p>Table 29 Parks Canada Spending Impacts in the Teslin - Watson Lake Area</p>					
Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,288,850	\$526,327	\$440,516	12.8	N.A.
Year 2	\$2,198,850	\$909,208	\$763,786	21.3	N.A.
Year 3	\$2,758,850	\$1,093,175	\$909,612	25.1	N.A.
Year 4	\$2,110,350	\$908,122	\$784,369	22.6	N.A.
Year 5	\$1,128,850	\$629,066	\$573,494	17.5	N.A.
Year 6	\$1,088,850	\$632,483	\$581,592	17.7	N.A.
Year 7	\$978,850	\$606,620	\$564,318	17.2	N.A.
Year 8	\$938,850	\$614,503	\$578,223	17.4	N.A.
Year 9	\$738,850	\$540,255	\$518,120	16	N.A.
Year 10	\$768,850	\$550,166	\$525,718	16.3	N.A.
10-Year Cumulative Impact	\$14,000,000	\$7,009,925	\$6,239,748	183.9	N.A.
<p>Notes:</p> <ol style="list-style-type: none"> 1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts. 2. These impacts are derived from the Direct Impacts only. 3. N.A. = not available. 4. The GDP impact represents the expected amount of value added actually retained within the area - which is about 50% of the original expenditure. 5. The employment impact of Parks Canada spending is substantial: over 18 FTE on average for this period. 					

Table 30
Parks Canada Spending Impacts in the Yukon Territory

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,288,850	\$698,390	\$549,103	15.7	\$26,654
Year 2	\$2,198,850	\$1,202,811	\$953,291	26.4	\$36,378
Year 3	\$2,758,850	\$1,447,578	\$1,138,954	31.2	\$39,909
Year 4	\$2,110,350	\$1,211,842	\$977,020	28.1	\$33,271
Year 5	\$1,128,850	\$853,437	\$712,495	21.8	\$17,662
Year 6	\$1,088,850	\$859,395	\$721,395	22.2	\$17,864
Year 7	\$978,850	\$826,518	\$699,872	21.6	\$13,196
Year 8	\$938,850	\$838,458	\$716,010	22	\$9,922
Year 9	\$738,850	\$742,903	\$640,638	20.2	\$8,013
Year 10	\$768,850	\$756,447	\$650,578	20.6	\$8,609
10-Year Cumulative Impact	\$14,000,000	\$9,437,779	\$7,759,356	229.8	\$211,478

Notes:

1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.
2. These impacts are derived from the Direct and Indirect Impacts.
3. Tax revenues are substantially larger in the early years of park establishment when there are significant construction activities.
4. Labour income impacts account for a large (82%) proportion of GDP impacts.

Table 31
Total Spending Impacts in the Teslin - Watson Lake Area

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,562,850	\$588,557	\$489,736	14.6	N.A.
Year 2	\$2,746,850	\$1,033,588	\$862,226	24.8	N.A.
Year 3	\$3,619,350	\$1,284,794	\$1,061,345	30.5	N.A.
Year 4	\$3,264,100	\$1,164,455	\$987,358	29.8	N.A.
Year 5	\$2,595,100	\$952,638	\$829,775	26.6	N.A.
Year 6	\$2,844,500	\$1,020,264	\$888,722	28.7	N.A.
Year 7	\$3,008,500	\$1,056,620	\$920,668	29.9	N.A.
Year 8	\$3,242,500	\$1,126,664	\$983,793	31.9	N.A.
Year 9	\$3,316,500	\$1,114,606	\$972,910	32.2	N.A.
Year 10	\$3,825,500	\$1,233,236	\$1,066,554	35.6	N.A.
10-Year Cumulative Impact	\$30,025,750	\$10,575,422	\$9,063,087	284.6	N.A.

Notes:

1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.
2. These impacts are derived from the Direct Impacts only.
3. N.A. = not available.
4. Approximately 1/3 of spending is forecast to be retained in the local area as value-added, and a very high percentage (90%) of this GDP impact is accounted for by labour income.
5. Total employment impacts reflect FTE which could represent as much as three times as many actual jobs in the local area.

<p>Table 32 Total Spending Impacts in the Yukon Territory</p>					
Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,562,850	\$782,492	\$612,233	17.8	\$32,679
Year 2	\$2,746,850	\$1,371,014	\$1,079,550	30.5	\$48,428
Year 3	\$3,619,350	\$1,706,673	\$1,333,481	37.6	\$58,480
Year 4	\$3,264,100	\$1,558,433	\$1,237,246	36.6	\$58,116
Year 5	\$2,595,100	\$1,290,919	\$1,040,989	32.6	\$49,028
Year 6	\$2,844,500	\$1,383,694	\$1,115,074	35.1	\$55,454
Year 7	\$3,008,500	\$1,434,919	\$1,156,680	36.6	\$56,811
Year 8	\$3,242,500	\$1,530,961	\$1,235,948	39	\$59,561
Year 9	\$3,316,500	\$1,519,507	\$1,223,706	39.3	\$63,677
Year 10	\$3,825,500	\$1,680,076	\$1,344,008	43.3	\$74,806
10-Year Cumulative Impact	\$30,025,750	\$14,258,688	\$11,378,915	348.4	\$557,040
<p>Notes: 1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts. 2. These impacts are derived from Direct and Indirect Impacts. 3. Close to 50% of total spending is forecast to be retained within the territorial economy as GDP. 4. This level of spending is likely to create a total of almost 350 FTE or possibly over 1,000 seasonal jobs.</p>					

Summary of Wolf Lake Economic Impacts

Table 33 presents a summary of the economic impacts associated with the spending described earlier. This table gives the ten year cumulative total of impacts.

1. Visitor Spending Impacts

Teslin-Watson Lake Area

The level of attributable visitor spending over the ten year period is expected to increase 11 times that of the first year. The GDP impact is expected to grow in a similar manner over the period of analysis. Labour income impacts represents 79% of GDP impacts, confirming the large employment effect of tourism products, facilities and services. The ten year cumulative employment impact is expected to be approximately 100 full-time equivalents; however, this could represent as many as 300 - 400 seasonal jobs; or 30 - 40 seasonal jobs per year.

Yukon Territory

Visitor spending impacts are greater in the territory since both direct and indirect impacts are included in the measurement of economic impacts. Almost \$5 million is expected to be gained and retained in the territorial economy from visitor spending over this ten year period. And all levels of government are expected to gain almost \$350,000 in revenues from this visitor spending, or approximately \$35,000 each year during this ten year period.

2. Parks Canada Spending Impacts

Teslin-Watson Lake Area

The GDP impact from Parks Canada spending varies between \$526,000 in the first year of park establishment to over \$1 million in the third year. However, when the park is established, it is expected that the GDP impact will be in the \$½ million range annually with the vast majority of these impacts being accounted for as labour income. For example, in year ten of park establishment over 95% of GDP is accounted for as labour income from Parks Canada spending. Annual employment related to Parks Canada spending will range from 13 to 25 FTE and average 18 FTE each year.

Yukon Territory

The \$14 million forecast spent by Parks Canada in the territory should produce an annual average GDP impact of just under \$1 million. Approximately 82% of this GDP impact is explained as labour income for an annual average of just under \$800,000. Employment in the territory should be approximately 23 FTE per year and all governments are forecast to gain revenues of over \$21,000 on average each year.

Table 33 Ten-Year Cumulative Summary of Impacts for the Wolf Lake Alternative		
	Teslin-Watson Lake	Yukon Territory
Visitor Spending		
Gross Domestic Product	\$3,565,428	\$4,820,909
Labour Income	\$2,823,339	\$3,619,559
Employment	100.7	118.6
Tax Revenue	Not Available	\$345,562
Parks Canada Spending		
Gross Domestic Product	\$7,009,925	\$9,437,779
Labour Income	\$6,239,748	\$7,759,356
Employment	183.9	229.8
Tax Revenue	Not Available	\$211,478
Total Spending		
Gross Domestic Product	\$10,575,422	\$14,258,688
Labour Income	\$9,063,087	\$11,378,915
Employment	284.6	348.4
Tax Revenue	Not Available	\$557,040

3. Total Spending Impacts

Teslin-Watson Lake Area

Although visitor spending is forecast to exceed Parks Canada spending in the Teslin-Watson Lake area by about \$2 million, the economic impacts of this spending are substantially different - Parks Canada spending has a much higher impact. However, of the combined spending (\$30 million over 10 years) the average annual GDP impact in the local area is forecast to be over \$1 million. This represents value added that is expected to be retained in the area. Labour income should be approximately \$900,000 on average and employment should be over 28 FTE per year during this ten year period. This could mean approximately 85 seasonal jobs per year in the local area, where most economic impacts are going to be felt (based on 3 seasonal jobs of 4 months each).

Yukon Territory

The average annual GDP impact is forecast to be approximately \$1.4 million in the territory and the labour income impact should exceed \$1.1 million annually. Employment impacts are forecast to vary between a low of 18 FTE in the first year of park establishment to a high of 43 FTE in the tenth year. Tax revenue to all levels of government is forecast to average over \$55,000 each year, with visitor spending more than Parks Canada's spending.

Other Wolf Lake Economic Impacts

This study concentrates on the economic impacts that might be expected from the establishment of a new national park in the Wolf Lake area. While these economic impacts are described above, there are likely to be other economic impacts of concern and interest to area residents and other stakeholders.

1. Current land uses - Aboriginal traditional land uses are protected by land claims agreements and rights established in Canadian law; a new national park would not affect these uses and rights. On the other hand, any commercial forestry activities may have to be curtailed or relocated to a different area. Similarly, non-native residents of the area may have to select alternate areas for such activities as hunting and resource harvesting (primarily trapping and outfitting), although it may be possible to make some arrangement to allow these activities. For example, local precedents for allowing hunting and other types of harvesting by local non-native residents have been established in parks such as Wapusk in northern Manitoba and Gros Morne in Newfoundland.

2. Commercial opportunities - The creation of a new national park creates many new opportunities for local businesses. The new park will have requirements for goods and services that are most easily supplied locally. Such needs lead directly (and indirectly) to opportunities for existing businesses in the areas to expand their facilities and services or for new businesses to be created. The new opportunities have been divided between those related to visitors and those related to the new park.

Visitor facilities/services

The tourism inventory for the Wolf Lake area - i.e. Watson Lake to Teslin - indicated that, although there are visitor facilities and services available, with new demands related to slowly increasing visitor numbers and new destination visitors wishing supplies and guiding services, there may well be opportunities for existing businesses to expand or new businesses to be established. The types of service opportunities, especially in the Teslin area, might include:

- in-park guiding services;
- floatplane fly-in services;
- canoe and boat rental/charters;
- Wolf River and Nisutlin River boating expeditions/charters.

Possible business expansions related to visitor spending could be useful in the following areas:

- seasonal accommodation (new capacity as well as enhanced quality);
- food and beverage service, especially seasonal;
- automobile services (gas and repairs);
- local arts and crafts sales
- visual art products.

Park goods and services

The creation of a park office will produce a demand for a wide variety of goods and services in support of the operation within its vicinity. If, as our scenario suggested, the park office is located in Teslin, this is the area where most park oriented goods and services will be in need. The goods and services requirements for a park range from construction and repair of facilities to office supplies and utilities. In addition, any new staff hired will require housing and other services normally required to operate a household. While each of these areas of need may not be sufficient to warrant new businesses, there will certainly be an opportunity for existing businesses to expand or increase the range of goods and services offered. The types of opportunities could include the following:

- service contracts: garbage collection, remote camp maintenance, office cleaning, and other business services;
- automobile services (gas, repairs and mechanics);
- machinery and equipment rentals, service and repairs;
- construction contracts; and
- part-time and seasonal employment.

Jennings Lake Economic Impacts

The following six tables (34 - 39) present the detailed estimates of economic impacts associated with the spending described in earlier chapters for the Jennings Lake alternative. The “Notes” at the bottom of each table are the same as those in the similar tables for the Wolf Lake Analysis. Table 40 presents a summary of the cumulative results over the ten year period of spending.

<p>Table 34 Visitor Spending Impacts in the Good Hope Lake Area</p>					
Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$274,000	\$57,324	\$41,507	1.4	N.A.
Year 2	\$548,000	\$114,648	\$83,015	2.9	N.A.
Year 3	\$860,500	\$180,462	\$130,815	4.6	N.A.
Year 4	\$1,150,000	\$243,446	\$176,517	6.2	N.A.
Year 5	\$1,451,000	\$307,845	\$223,268	7.9	N.A.
Year 6	\$1,755,600	\$373,187	\$270,718	9.6	N.A.
Year 7	\$2,029,600	\$430,511	\$312,225	11	N.A.
Year 8	\$2,303,600	\$487,835	\$353,733	12.5	N.A.
Year 9	\$2,577,600	\$545,159	\$395,240	13.9	N.A.
Year 10	\$3,056,600	\$645,371	\$467,803	16.4	N.A.
10-Year Cumulative Impact	\$16,000,400	\$3,385,788	\$2,454,841	86.4	N.A.
<p>Notes:</p> <ol style="list-style-type: none"> 1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts. 2. These impacts are derived from the Direct Impacts only. 3. N.A. = not available. 4. Labour income comprises a large part of GDP from visitor spending, reflecting the high labour content in tourism products. 5. The GDP expected to be retained in the local area rises from \$57,000 to almost \$650,000 by the tenth year, and employment is expected to be over 16 FTE. 					

<p>Table 35 Visitor Spending Impacts in British Columbia</p>					
Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$274,000	\$90,726	\$62,031	2.1	\$6,157
Year 2	\$548,000	\$181,453	\$124,062	4.1	\$12,313
Year 3	\$854,400	\$285,273	\$195,250	6.5	\$19,414
Year 4	\$1,150,000	\$384,728	\$263,386	8.8	\$26,199
Year 5	\$1,451,000	\$486,366	\$333,048	11.1	\$33,143
Year 6	\$1,755,600	\$589,459	\$403,728	13.5	\$40,191
Year 7	\$2,029,600	\$680,185	\$465,759	15.6	\$46,347
Year 8	\$2,303,600	\$770,912	\$527,790	17.6	\$52,504
Year 9	\$2,577,600	\$861,638	\$589,821	19.7	\$58,660
Year 10	\$3,056,600	\$1,020,244	\$698,263	23.3	\$69,423
10-Year Cumulative Impact	\$16,000,400	\$5,350,984	\$3,663,138	122.3	\$364,351
<p>Notes:</p> <p>1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.</p> <p>2. These impacts are derived from the Direct and Indirect Impacts.</p> <p>3. Labour income accounts for approximately 68% of GDP impacts.</p> <p>4. As visitor spending grows in the province so do all the measures of economic impact.</p>					

Table 36
Parks Canada Spending Impacts in the Good Hope Lake Area

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,288,850	\$541,226	\$456,630	13.9	N.A.
Year 2	\$2,198,850	\$941,772	\$808,707	23.8	N.A.
Year 3	\$2,758,850	\$1,141,889	\$978,952	29.4	N.A.
Year 4	\$2,110,350	\$957,238	\$831,615	25.4	N.A.
Year 5	\$1,128,850	\$644,373	\$584,738	17.3	N.A.
Year 6	\$1,088,850	\$642,054	\$586,225	17.2	N.A.
Year 7	\$978,850	\$621,375	\$574,503	16.9	N.A.
Year 8	\$938,850	\$633,420	\$594,192	17.2	N.A.
Year 9	\$738,850	\$552,239	\$524,775	15.4	N.A.
Year 10	\$768,850	\$565,222	\$534,464	15.8	N.A.
10-Year Cumulative Impact	\$14,000,000	\$7,240,808	\$6,474,801	192.3	N.A.

Notes:

1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.
2. These impacts are derived from the Direct Impacts only.
3. N.A. = not available.
4. The GDP impact represents the expected amount of value added actually retained within the area - which is over 50% of the original expenditure.
5. The employment impact of Parks Canada spending is substantial: over 19 FTE on average for this period.

Table 37
Parks Canada Spending Impacts in British Columbia

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,288,850	\$830,340	\$647,363	19.4	\$43,040
Year 2	\$2,198,850	\$1,463,029	\$1,158,168	33.9	\$84,405
Year 3	\$2,758,850	\$1,771,674	\$1,397,374	41.4	\$107,000
Year 4	\$2,110,350	\$1,467,296	\$1,165,453	35.2	\$70,495
Year 5	\$1,128,850	\$992,168	\$807,002	24.4	\$28,510
Year 6	\$1,088,850	\$987,226	\$805,725	24.2	\$24,003
Year 7	\$978,850	\$955,161	\$786,183	23.6	\$21,216
Year 8	\$938,850	\$975,048	\$810,454	24.1	\$19,046
Year 9	\$738,850	\$849,589	\$709,132	21.5	\$8,569
Year 10	\$768,850	\$867,799	\$722,232	22	\$9,629
10-Year Cumulative Impact	\$14,000,000	\$11,159,330	\$9,009,086	269.7	\$415,913

Notes:

1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts.
2. These impacts are derived from the Direct and Indirect Impacts.
3. Tax revenues are substantially larger in the early years of park establishment when there are significant construction activities.
4. Labour income impacts account for a large (81%) proportion of GDP impacts.

<p>Table 38 Total Spending Impacts in the Good Hope Lake Area</p>					
Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,562,850	\$598,550	\$498,137	15.3	N.A.
Year 2	\$2,746,850	\$1,056,420	\$891,722	26.7	N.A.
Year 3	\$3,613,250	\$1,322,351	\$1,109,767	34	N.A.
Year 4	\$3,260,350	\$1,200,684	\$1,008,132	31.6	N.A.
Year 5	\$2,579,850	\$952,218	\$808,006	25.2	N.A.
Year 6	\$2,844,450	\$1,015,241	\$856,943	26.8	N.A.
Year 7	\$3,008,450	\$1,051,886	\$886,728	27.9	N.A.
Year 8	\$3,242,450	\$1,121,255	\$947,925	29.7	N.A.
Year 9	\$3,316,450	\$1,097,398	\$920,015	29.3	N.A.
Year 10	\$3,825,450	\$1,210,593	\$1,002,267	32.2	N.A.
10-Year Cumulative Impact	\$30,000,400	\$10,626,596	\$8,929,642	278.7	N.A.
<p>Notes: 1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts. 2. These impacts are derived from the Direct Impacts only. 3. N.A. = not available. 4. Approximately 1/3 of spending is forecast to be retained in the local area as value-added, and a very high percentage (89%) of this GDP impact is accounted for by labour income. 5. Total employment impacts reflect FTE which could represent as much as three times as many actual jobs in the local area.</p>					

Table 39
Total Spending Impacts in British Columbia

Year of Impact	Total Expenditure	GDP Impact	Labour Income Impact	Employment Impact	Tax Revenue Impact
Year 1	\$1,562,850	\$921,066	\$709,394	21.5	\$49,197
Year 2	\$2,746,850	\$1,644,482	\$1,282,230	38	\$96,718
Year 3	\$3,613,250	\$2,056,947	\$1,592,624	47.9	\$126,043
Year 4	\$3,260,350	\$1,852,024	\$1,428,839	44	\$96,694
Year 5	\$2,579,850	\$1,478,534	\$1,140,050	35.5	\$61,653
Year 6	\$2,844,450	\$1,576,685	\$1,209,453	37.7	\$64,194
Year 7	\$3,008,450	\$1,635,346	\$1,251,942	39.2	\$67,563
Year 8	\$3,242,450	\$1,745,960	\$1,338,244	41.7	\$71,550
Year 9	\$3,316,450	\$1,711,227	\$1,298,953	41.2	\$67,229
Year 10	\$3,825,450	\$1,888,043	\$1,420,495	45.3	\$79,052
10-Year Cumulative Impact	\$30,000,400	\$16,510,314	\$12,672,224	392	\$779,893
Notes: 1. The Total Expenditure column is meant for reference only; it is not an impact, but the source of the impacts. 2. These impacts are derived from the Direct and Indirect Impacts. 3. 55% of total spending is forecast to be retained within the provincial economy as GDP. 4. This level of combined parks and visitor spending is likely to create a total of almost 400 FTE or possibly over 1,000 seasonal jobs.					

Table 40 Ten-Year Cumulative Summary of Impacts for the Jennings Lake Alternative		
	Good Hope Lake	British Columbia
Visitor Spending		
Gross Domestic Product	\$3,385,788	\$5,350,984
Labour Income	\$2,454,841	\$3,663,138
Employment	86.4	122.3
Tax Revenue	N.A.	\$364,351
Parks Canada Spending		
Gross Domestic Product	\$7,240,808	\$11,159,330
Labour Income	\$6,474,801	\$9,009,086
Employment	192.3	269.7
Tax Revenue	N.A.	\$415,913
Total Spending		
Gross Domestic Product	\$10,626,596	\$16,510,314
Labour Income	\$8,929,642	\$12,672,224
Employment	278.7	392
Tax Revenue	N.A.	\$779,893

Summary of Jennings Lake Economic Impacts

Very similar results emerge for Jennings Lake area as for Wolf Lake. These results are presented below.

1. Visitor Spending Impacts

Good Hope Lake Area

The level of attributable visitor spending over the ten year period is expected to increase at least 11 times that of the first year. The GDP impact is expected to grow in a similar manner over the period of analysis. Labour income impacts represents 73% of GDP impacts, confirming the large employment effect of tourism products, facilities and services. The ten year cumulative employment impact is expected to be approximately 86 full-time equivalents (FTE), representing

as many as 250 - 300 seasonal jobs.

British Columbia

Visitor spending impacts are greater in the province since both direct and indirect impacts are included in the measurement of economic impacts. Over \$5 million is expected to be gained and retained in the provincial economy from visitor spending over this ten year period. And all levels of government are expected to gain over \$360,000 in revenues from this visitor spending, or approximately \$36,000 each year during this ten year period.

2. Parks Canada Spending Impacts

Good Hope Lake Area

The GDP impact from Parks Canada spending varies between \$541,000 in the first year of park establishment to over \$1.1 million in the third year. However, when the park is established, it is expected that the GDP impact will be in the \$½ million range annually with the vast majority of these impacts being accounted for as labour income. For example, in year ten of park establishment almost 90% of GDP is accounted for as labour income from Parks Canada spending. Annual employment related to Parks Canada spending will range from 14 to 29 FTE and average 19 FTE each year.

British Columbia

The \$14 million forecast that would be spent by Parks Canada in the province would produce an annual average GDP impact of just over \$1 million. Approximately 81% of this GDP impact is explained as labour income for an annual average of just over \$900,000. Employment in the province should be approximately 27 FTE per year and all governments are forecast to gain revenues of over \$41,000 on average each year.

3. Total Spending Impacts

Good Hope Lake Area

Although visitor spending is forecast to exceed Parks Canada spending in the Jennings Lake area by about \$2 million, the economic impacts of this spending are substantially different - Parks Canada spending has a much higher impact. However, of the combined spending (\$30 million over 10 years) the average annual GDP impact in the local area is forecast to be over \$1 million. This represents value added that is expected to be retained in the area. Labour income should be approximately \$900,000 on average and employment should be just under 28 FTE per year during this ten year period. This could mean approximately 85 jobs per year in the local area, where most economic impacts are going to be felt.

British Columbia

The average annual GDP impact is forecast to be approximately \$1.6 million in the province and the labour income impact should exceed \$1.2 million annually. Employment impacts are forecast to vary between a low of 21 FTE in the first year of park establishment to a high of 48 FTE in the

third year. Tax revenue to all levels of government is forecast to average just under \$78,000 each year, with visitor spending more than Parks Canada's spending.

Other Jennings Lake Economic Impacts

Just as there were other economic impacts for the Wolf Lake alternative, so will there be other economic impacts of concern and interest to Jennings Lake area residents and other stakeholders. Many of the same impacts will be experienced.

1. Current land uses - It is not expected that aboriginal or First Nation traditional land uses would be affected by the establishment of a national park. In fact, frequently an Impact and Benefits Agreement is negotiated with traditional users of the land concerned. Commercial forestry activities may have to be stopped and/or relocated to different areas. Similarly, non-native residents of the area may have to select alternative areas for such activities as hunting and resource harvesting (such as trapping and outfitting), although negotiations during the planning phase for the park could result in some arrangement to allow these activities. The extent to which these impacts will be realized will depend upon negotiations between the different levels of government as well as with the input of area residents.
2. Commercial opportunities - A new national park may create many new opportunities for local businesses. The new park will need goods and services that are most logically available from local suppliers. Such needs lead to opportunities for existing businesses in the area to expand their facilities and services, or for new businesses to be created depending on the level of demand. The potential for new/expanded business associated with new demands from the slowly increasing visitor numbers and new destination visitors seeking supplies and other trip services, may lead to further opportunities for existing businesses to expand or new businesses to be established. The new opportunities have been divided between those related to visitor spending and those related to the new park.

Visitor facilities/services

The tourism inventory for the Jennings Lake area - i.e. Yukon border to Dease Lake showed that, although there are some visitor facilities and services available in the region, these are not extensive, and, more to the point, there are very few in Good Hope Lake. The types of service opportunities, especially in the Good Hope Lake area, are essentially the same as in the Wolf Lake area, and might include:

- in-park guiding services
- air charter (floatplane) fly-in services
- canoe and boat rental/charters
- Jennings River and Teslin River boating expeditions/charters
- fishing, nature appreciation, and/or bird-watching tours

As mentioned in the description of the Jennings Lake alternative, some of the business opportunities might lie in the Teslin area due to the Jennings River flowing into Teslin

Lake. It will be possible to access a Jennings Lake park area through the Jennings River.

Possible business expansions related to visitor spending could be useful in the following areas:

- seasonal accommodation
- food and beverage service, especially seasonal
- automobile services (gas and repairs)
- local arts and crafts
- visual arts and park memorabilia.

Park goods and services

The creation of the park office will generate a demand for varied goods and services in support of the operation. If, as our scenario suggested, the park office is located in Good Hope Lake, this is the area where most park oriented goods and services will be needed. Requirements for a park operation range from construction and repair of facilities to office supplies and cleaning. New staff from outside the area will require housing and other services required by all households. While each of these areas of need may not be sufficient to warrant new businesses, there will certainly be an opportunity for existing businesses to expand or increase the range of goods and services offered. The types of opportunities could include the following:

- service contracts: garbage collection, remote camp maintenance, office cleaning, and other business services;
- automobile services (gas, repairs and mechanics)
- machinery and equipment rentals, service and repairs
- construction contracts

There is also the possibility of part-time, seasonal or full-time employment with a new park. While not a business opportunity, it is nonetheless an important point to note for area residents.

Summary

In summary, the impacts between the two alternatives appear to be quite similar. The final chapter examines these similarities and differences.

6. Conclusion - Comparison of Alternatives

This study has forecast the economic impacts that might be associated with the establishment of a national park in Natural Region #7. The research has forecast visitor numbers and spending along with forecast spending by Parks Canada. A ten year time frame has been used for the analysis in which to predict economic impacts. Two alternatives have been described: one is for the establishment of a park in the Wolf Lake area of Yukon, and the other is for a park in the Jennings Lake area of northern British Columbia. This chapter examines the similarities and differences between the two alternatives.

It is also important to note, however, that there is the potential for a larger mosaic of trans-boundary conservation lands that could have a national park embedded within other types of land designations such as provincial/territorial parks, habitat protection areas or wildlife areas. A national park also could be trans-boundary in nature or could be established in more than one unit with conservation lands connecting the units. The economic impacts associated with these types of landscape-scale scenarios are more difficult to estimate since the potential configuration of such conservation lands is unknown. A mosaic of conservation lands could be achieved through regional land use planning processes, provided the local communities and First Nations supported such an approach to land use.

Table 41 presents a summary of the visitor numbers and spending that were forecast for each of the alternatives for a potential new park. Since the spending of Parks Canada was identical in each location, the forecast \$14 million of Parks Canada spending is not included in the table. However, this table does show that over twice as many visitors would be expected to form the visitor market for the Wolf Lake alternative compared to the Jennings Lake alternative. In terms of potential public contact and awareness, therefore, the Wolf Lake alternative appears to have some advantages. However, due to substantially different spending patterns of these visitors between these two areas, the forecast amount of visitor spending is almost identical. With over double the average daily spending in B.C., the difference in visitor numbers results in forecast spending being virtually the same for either alternative.

Table 42 presents a summary of the economic impacts in the local areas of the potential new park for each alternative by source, i.e. visitor spending and Parks Canada spending. The impacts in each of the local areas is quite similar. Visitor spending is forecast to have a greater impact in Yukon than in B.C., but Parks Canada spending is forecast to have a slightly higher impact in B.C. than in Yukon. The end result is that within the local areas the total impacts are quite similar.

Table 41 Summary of Forecast Visitor Numbers and Spending Associated with a New National Park in Natural Region #7 by Alternative Locations		
	Wolf Lake	Jennings Lake
Total Visitors over 10 years	108650	52450
Spending by Drive-by visitors		
Average daily expenditure	\$23.11	\$54.00
Assumed attributable spending/day	\$7.70	\$18.00
Total Visitor Spending over 10 years		
Drive-by visitors	\$750,750	\$725,400
Destination visitors	\$15,275,500	\$15,275,500

Table 42 Comparison of Total 10 Year Economic Impacts in the Local Areas from a New National Park		
Impact Source and Type	Teslin-Watson Lake	Good Hope Lake
Visitor Spending		
GDP (millions)	\$3.6	\$3.4
Labour Income (millions)	\$2.8	\$2.5
Employment (FTE)	101	86
Parks Canada Spending		
GDP (millions)	\$7.0	\$7.2
Labour Income (millions)	\$6.2	\$6.5
Employment (FTE)	184	192
Total Spending		
GDP (millions)	\$10.6	\$10.6
Labour Income (millions)	\$9.1	\$8.9
Employment (FTE)	285	279

When the forecast economic impacts are viewed from the perspective of the territory and province (Table 43), a slightly different picture emerges. In the case of both visitor spending and Parks Canada spending, the B.C. alternative produces higher economic impacts. While the GDP, labour income and employment impacts are reasonably close in each location, the tax impacts are substantially different: B.C. is forecast to enjoy 140% of the taxes that might be gained by the Yukon territory. The largest differences occur with respect the impacts of Parks Canada spending. B.C. impacts are significantly larger than those felt in Yukon.

Table 43 Comparison of Total 10 Year Economic Impacts in the Territory and Province from a New National Park		
Impact Source and Type	Yukon Territory	British Columbia
Visitor Spending		
GDP (millions)	\$4.8	\$5.4
Labour Income (millions)	\$3.6	\$3.7
Employment (FTE)	119	122
Tax Revenues (thousands)	\$346	\$364
Parks Canada Spending		
GDP (millions)	\$9.4	\$11.2
Labour Income (millions)	\$7.8	\$9.0
Employment (FTE)	230	270
Tax Revenues (thousands)	\$211	\$416
Total Spending		
GDP (millions)	\$14.3	\$16.5
Labour Income (millions)	\$11.4	\$12.7
Employment (FTE)	348	392
Tax Revenues (thousands)	\$557	\$780

In conclusion, the analysis indicates quite similar impacts upon each of the local areas examined, but with higher impacts occurring in B.C. when examined in a broader perspective. However, visitor numbers in B.C. are forecast as less than half that forecast to be experienced in Yukon.

The concept of a national park in more than one unit, such as Grasslands National Park in Saskatchewan which is in two separate blocks, provides some interesting possibilities for park and regional planning but complicates the economic impact analysis. The two analyses presented in this paper are separate and distinct and cannot be added to reflect a two unit national park. However, an integrated analysis that combines elements of both these analyses and incorporates other impacts associated with the designation of other lands for conservation purposes is possible. If such a configuration were considered, the economic impact analysis would also show how the economic impacts would be spread between the various areas of Teslin, Watson Lake and Good Hope Lake. The economic impacts would likely be greater than either of the single location alternatives described in this study.

While single park units and single jurisdiction negotiations appear to be the norm, there is no reason why a multi-block, multi-designation and multi-jurisdictional solution could not be considered for a new national park in Natural Region #7. Depending on the configuration of such a proposal, an economic impact analysis could be designed to estimate the economic impacts likely to occur. One of the advantages of such a multi-tiered approach is that different designations can be used to meet conservation purposes while allowing other economic development opportunities to continue. This multi-faceted approach may be considered more of a sustainable development approach in that it attempts to optimize the objectives of proponents of both conservation and development.

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APPENDICES

1. Tourism Facility and Service Inventory
2. Expenditure Forecast: Hypothetical Wolf Lake National Park Concept
3. Detailed Economic Impact Printouts
 - A) Wolf Lake Impacts
 - B) Jennings Lake Impacts

APPENDIX 1

Tourism Facility and Service Inventory

List of Facilities and Services in the Study Areas

APPENDIX 1

Potential Economic Benefits of National Park Wolf Lake, Jennings Lake Areas
Notes from Field Work along Alaska and Cassiar Highways
Gillian McKee for *The Outspan Group Inc.*
October 21 – 27, 2004

Recorded information about visitor services from the following locations:

Alaska Highway from Lower Post to Johnson Crossing
Cassiar Highway from Dease Lake to Junction with Alaska Highway
Communities of Watson Lake, Teslin, Dease Lake

Recorded Information in Database about the following types of services:

Accommodation – roofed, camping; with or without food services
Food and Beverage – restaurant, fast food take out, groceries
Transportation – gas, repairs, travel, RV service, rental, highway pull offs with or without garbage, outhouses, information signs
Retail – supplies, souvenirs
Recreation, Entertainment – attractions, activities
Tour Operators – guiding, tourism outfitting – canoeing, hiking, lodges
Registered Hunting Outfitter Concession
Festivals, Events
Other Visitor Services

List of Facilities and Services

<u>Type of Facility/Service</u>	<u>Name of Service Facility</u>
Transportation - hwy pull offs	
Accommodation roofed	Big Horn Hotel
Accommodation roofed	Belvedere Motor Hotel
Accommodation roofed	Gateway Motor Inn
Accommodation roofed	Watson Lake Hotel
Accommodation roofed	Air Force Lodge
Accommodation roofed	Cedar Lodge Motel
Accommodation roofed	Hadwen's Airport B&B
Accommodation roofed	Cozy Nest Hideaway B&B
Accommodation roofed	Bar B's B&B
Accommodation camping, RV	Campground Services
Accommodation camping, RV	Downtown RV Park
Accommodation camping	Watson Lake Campground
Food/Beverage with accommodation	Belvedere Motor Hotel Coffee Shop
Beverage with accommodation	Watson Lake Hotel
Food/Beverage with accommodation	Pizza Palace

<u>Type of Facility/Service</u>	<u>Name of Service Facility</u>
Food restaurant	Bee Jay's Services
Food - fast food	Sign Post Tempo and Tags
Food restaurant	Nugget Restaurant
Food - fast food take out	Archie's
Food groceries	Watson Lake Foods Ltd Super A
Beverage	Liquor Store
Transportation - gas, repairs; RV repairs	Bee Jay's Services
Transportation - gas	Sign Post Tempo and Tags
Transportation - gas	Campground Services
Transportation - gas	Jercal Petro Canada
Transportation - gas, repairs; RV repairs	Watson Lake Motors
Transportation - repairs	CP Collision Services
Transportation - repairs	NAPA Auto Parts
Transportation - repairs	Capital Towing
Transportation - repairs	Rudy's Towing
Transportation - repairs	Northern Metallic Services
Transportation- air charter	TransNorth Helicopter
Transportation - air charter	Angus Air
Transportation - air charter	Northern Rockies Air Charter
Transportation - air charter	Alpine Aviation
Transportation - air facilities	Watson Lake airport
Transportation - air facilities	Float Plane base
Transportation - bus travel	Greyhound Bus Depot
Recreation	Wye Lake Park
Recreation	Recreational Complex
Recreation	horse back riding
Recreation	Greenways Greens
Recreation	historical walking tour
Recreation	Mt. Maichen Ski Hill
Recreation	Watson Lake Library
Recreation	Lucky Lake Recreational Day Use Area;
	Liard Canyon Recreation Site
	Watson Lake Trail System
	stocked lakes
Recreation	
Recreation	
Recreation	
Retail	As You Wish Variety V&S
Retail - souvenirs	Hougen's Department Store and Souvenirs
	and Gifts Shop
	Blue Moose Crafts
Retail - souvenirs	Archie's
Retail - souvenirs	Dee's Ceramics Plus
Retail	Judith's Fashion and Gift Ware
Retail	Stampeder Leather Crafts and Gifts
Retail	Outreach Program
Retail - native crafts	Superior Propane
Retail - propane	Polar Propane - cardlock
Retail - propane	Alaska Highway Interpretive Centre
Attraction	Northern Lights Centre
Attraction	Yukon sign, Welcome to N of 60
Attraction	

<u>Type of Facility/Service</u>	<u>Name of Service Facility</u>
Attraction	Signpost Forest
Attraction	Historic Airport Terminal
Attraction	Campbell Hwy
Event	Kaska Days
Event	Kiki Karnival
Event	Open Air Curling Bonspiel
Event	Curling Club Annual Spiel
Event	Yukon Cup Alpine Race Series
Event	Sno-Pitch Tournament
Event	Watson Lake Music Festival
Event	Discovery Days \$100,000 Bingo
Event	Golf Tournament and Skins Game
Event	Canada Day, Discovery Days
Tour Operator	Bar None Adventures
Tour Operator	Northern Rockies Air Charter
Tour Operators	Wild Yukon Journeys
Municipal Services	Watson Lake services
Accommodation - camping	Green Valley RV Campground
Accommodation - roofed, camping	Upper Liard Lodge
Accommodation - roofed, camping	Junction 37 Services
Accommodation - roofed, camping	Nugget City, Baby Nugget RV Park
Accommodation - camping	Big Creek Campground
Accommodation - roofed, camping	Rancheria Hotel and Motel, Rancheria RV Park
Accommodation - roofed, camping	Walker's Continental Divide Lodge
Accommodation - roofed	Swift River Lodge
Food/Beverage - restaurant with accommodation	Upper Liard Lodge
Food - restaurant with accommodation	Junction 37 Services
Beverage	Saloon Junction 37 Services
Food	Sally's Café
Food - restaurant with accommodation	Wolf It Down Restaurant
Food - restaurant with accommodation	Rancheria Hotel and Motel, Rancheria RV Park
Food - restaurant with accommodation	Walker's Continental Divide Lodge
Food - restaurant with accommodation	Swift River
Transportation - gas	Junction 37 Services
Transportation - gas	Rancheria Hotel and Motel, Rancheria RV Park
Transportation - gas	Walker's Continental Divide Lodge
Transportation - gas	Swift River Lodge
Transportation - air facilities	Pine Lake Airstrip
Transportation - hwy pull offs	
Recreation	Rancheria Falls Recreation Site
Recreation	Morley River Recreation Site
Retail - souvenirs	Junction 37 Services
Retail - souvenirs	Northern Beaver Post
Retail - souvenirs	Swift River Lodge
Accommodation - roofed, camping	Dawson Peaks Resort
Accommodation roofed, camping	Yukon Motel
Accommodation - roofed	Nisutlin Trading Post
Accommodation - roofed, camping	Mukluk Annie's Salmon Bake

<u>Type of Facility/Service</u>	<u>Name of Service Facility</u>
Accommodation - camping	Teslin Lake Campground
Accommodation - roofed	Inn on the River
Food - restaurant with accommodation	Yukon Motel
Food - groceries	Nisutlin Trading Post
Food - fast food take out	Totem Pole
Food - restaurant with accommodation	Mukluk Annie's Salmon Bake
Food - restaurant with accommodation	Dawson Peaks Resort
Transportation - gas	Yukon Motel
Transportation - gas, repairs; RV repairs	Nisutlin Trading Post
Transportation - repairs	Frank's Repairs
Transportation - travel, bus	Greyhound Bus Depot
Transportation - air facilities	Teslin airstrip
Transportation - air facilities	float plane landing
Transportation - air facilities	float plane landing
Recreation	Teslin Municipal Boat Launch
Recreation	Teslin Lake Recreational Complex
Recreation	Nisutlin Bay Marina
Recreation	walking trails
Recreation	historical walking tour
Recreation	Nisutlin River
Attraction	George Johnston Museum
Attraction	Teslin Tlingit Heritage Centre
Attraction	Wildlife Museum
Attraction	Nisutlin River Delta National Wildlife Area
Retail - souvenirs	Yukon Motel
Retail - souvenirs, native crafts	Teslin Tlingit Heritage Centre
Retail	Red Wolf Computing
Retail	Teslin Tlingit Laundromat
Tour Operator	Nisutlin Outfitting
Tour Operator	Dawson Peaks Resort
Registered Hunting Outfitting Concession	Teslin Outfitters
Municipal Services	Teslin Services
Tour Operator	Wolf Lake Wilderness Lodge
Tour Operators	
Recreation	
Recreation	
Recreation	
Recreation	
Registered Hunting Outfitting Concession	Morley River
Registered Hunting Outfitting Concession	Lone Wolf Outfitting
Accommodation - roofed, camping	Babala Stone Sheep Outfitters
Food - fast food with accommodation	Johnson Crossing
Transportation - gas	Johnson Crossing
Attraction	Johnson Crossing
Recreation	Canol Road
Transportation - hwy pull offs	Teslin River
Accommodation - roofed	
Accommodation - roofed	Northway Motor Inn
	Arctic Divide Motel

<u>Type of Facility/Service</u>	<u>Name of Service Facility</u>
Accommodation - roofed	North Country Inn
Accommodation - camping	Dease Lake RV Park
Food - restaurant	Northway Country Kitchen
Food - restaurant	Gordo's Café
Food - groceries	Good Acre Stores Super Value 49
Beverage	BC Liquor Agency
Beverage	Tanzilla Pub
Transportation - gas, repairs	Dease Lake Service Station, NorGas
Transportation - gas	Petro Canada Gas
Transportation - propane	Kudah Propane
Transportation - repairs	Bill's Garage and Tire repair
Transportation - repairs	Chuck's Heavy Towing
Transportation - air facilities	Float Plane Base
Transportation - air facilities	Dease Lake Airport
Transportation - air charter	BC/Yukon Air
Transportation - air charter	Pacific Western Helicopters
Transportation - air sched	Northern Thunderbird Air
Retail	Teddy Bear Outpost
Retail	Watered Garden Quilt and Gift Shop
Retail	McLeod Mountain Supplies
Municipal Services	Dease Lake services
Accommodation - camping	Water's Edge Campground
Accommodation - roofed, camping	Dease River Crossing RV Park
Accommodation - roofed, camping	Moose Meadows
Accommodation - camping	Boya Lake Park
Accommodation - camping	Jade City Gift Shop
Accommodation - camping	Cassiar Mountain Jade Store and Mine
Retail	Jade City Gift Shop
Retail	Cassiar Mountain Jade Store and Mine
Transportation - air charter	Graham Air Ltd.
Transportation - gas	Kididza Services
Transportation - hwy pull offs	
Recreation	
Attraction/Recreation	Tuya Mountains Provincial Park
Event	Kaska Stick Gambling Championships
Guide Outfitter Hunting Concession	Kawdy Outfitter

APPENDIX 2

Expenditure Forecast Hypothetical Wolf Lake National Park Concept

Please Note: this park scenario is solely the creation of *The Outspan Group Inc.* and is endorsed by neither Parks Canada Agency nor CPAWS.

Hypothetical Development Scenario Developed by The Outspan Group Inc.

Wolf Lake National Park

CAPITAL DEVELOPMENT - VISITOR FACILITIES

1. Visitor Reception and Interpretive Centre - Teslin

Sub-Total

Building Component

5000 sq. ft. fully serviced, reception and orientation facilities

Office Space

AV presentation area, meeting space, retail space, kitchen, washrooms, storage

Interpretive displays

Building costs: @\$300/sq.ft. \$1,500,000

Exhibits: 1500 sq.ft. @ \$500/sq.ft. \$750,000

Site Component

30+ car parking / 5-6 bus/RV - asphalt surfaces

Paths around VRC - aggregate surface

Short Trails - soft surface

Site Costs: \$400,000

Sub-Total	\$2,650,000	\$2,650,000
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2. Interpretive Wayside - Alaska Highway, Km. 1059

parking lot - aggregate \$20,000

seasonal access road - 0.5 km. \$20,000

short trail - soft surface (0.5 km.) \$10,000

solar-powered biodegradable toilet - 1 @ \$10,000 \$10,000

Sub-Total	\$60,000	\$60,000
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3. Remote Group Campsites - Wolf Lake

4 campsites with tent pad and fuel wood storage @\$20,000 ea. \$80,000

loop trail system - soft surface - 20 km. @\$2,000/km. \$40,000

solar-powered biodegradable toilets - 4 @ \$10,000 ea. \$40,000

dockage - 4 @ \$15,000 ea. \$60,000

Sub-Total	\$220,000	\$220,000
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4. Park Signage

wood park signage - 4 \$100,000

other directional and interpretive signage \$75,000

Sub-Total	\$175,000	\$175,000
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5. Seasonal Park Office (Field Station) - Wolf Lake

1 unit - 1,200 sq.ft. @ \$200/sq.ft. \$240,000

Sub-Total	\$240,000	\$240,000
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6. Staff Residences - Teslin

2 units - 1,200 sq.ft. @ \$200/sq.ft. \$480,000

servicing \$20,000

Sub-Total	\$500,000	\$500,000
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7. Infrastructure Support/Community Investing

Roofed accommodation
community facilities
food services
others yet to be determined
total allowance for all projects

	\$1,000,000	
Sub-Total	\$1,000,000	\$1,000,000

Total Capital Investment	\$4,845,000
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Hypothetical Operations Concepts Developed by *The Outspan Group Inc.*

Wolf Lake National Park

Operations and Maintenance

1. Wages and Salaries

Estimated 6 full time equivalent positions
\$50,000/position for 10 years
20% administration for 10 years

	\$3,000,000	
	\$615,000	
Sub-Total	\$3,615,000	\$3,615,000

2. Operations and Maintenance

5% of capital costs each year for 10 years
Consumables and equipment - vehicles, boats, office admin, etc.

	\$2,422,500	
	\$632,500	
Sub-Total	\$3,055,000	\$3,055,000

3. Cooperative Management

An estimated \$75,000 per year
honoraria, travel, meeting costs

	\$750,000	
Sub-Total	\$750,000	\$750,000

4. Park Research and Monitoring

ecological and socio-economic research
allowance of \$50,000/year for 10 years

	\$500,000	
Sub-Total	\$500,000	\$500,000

5. Planning and Design

12.3% of total capital spending

	\$596,500	
Sub-Total	\$596,500	\$596,500

6. Contingency

Contingency spending

	\$638,500	
Sub-Total	\$638,500	\$638,500

Total O & M	\$9,155,000
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**Summary of Hypothetical
Concept Costs Developed by
*The Outspan Group Inc.***

Wolf Lake National Park

Summary of Forecast Expenditures

Capital Development	\$4,845,000
Operations and Maintenance	\$9,155,000
TOTAL 10 YEAR SPENDING	\$14,000,000

Please Note:

This development and operations scenario has been developed solely by *The Outspan Group Inc.* Neither this, nor any, scenario has been endorsed by Parks Canada Agency. Actual spending may be different from the scenario presented in this example.

APPENDIX 3

Detailed Economic Impact Printouts

- A) Wolf Lake Impacts
- B) Jennings Lake Impacts