



Alberta Public Land Grazing Lease 2016 Cost Survey Results

Alberta Environment and Parks

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1. Introduction

MNP LLP (“MNP”) was engaged by the Government of Alberta to conduct an independent survey of financial and in-kind costs incurred by Alberta’s farming and ranching industry in respect of their operations on public lands grazing leases for fiscal years that ended in 2015. Under long-term lease agreements with the government, farmers and ranchers pay fees, graze their cattle and undertake the development and management of the grazing resource on public land. These lease agreements, along with the supporting Acts and Regulations, management plans and operating guidelines result in land management activities that would be the responsibility of a private owner of leased grazing lands but that the lease holder undertakes on behalf of the province. These are termed “in-kind” costs.

2. Survey Approach and Methodology

Survey Scope

The survey was designed to determine the actual and in-kind costs of holding grazing leases, and specifically to identify the “in-kind” part of the fees paid by the industry for grazing cattle on public lands.

It listed common cost categories for investments and operating expenses that are incurred by farmers and ranchers that graze cattle, horses or bison on grazing leases and for each category sought information on the direct and indirect costs. The survey also collected information of interest on related production and operational data such as average weight gain for animals while on the lease. The range in cost data collected are summarized in Exhibit I (following page). The survey forms sent to individuals and associations holding leases indicate the complete breadth of information collected and can be found in Appendix A and B respectively.

This survey was conducted through mail, email, and fax with follow-up telephone calls to clarify issues of interpretation and questions that respondents had.

Direct and Indirect Costs

Lease holders were requested to provide an accounting of expenditures by activity for “in-kind” work that they undertook as a consequence of grazing cattle on public land in 2015. Direct costs were defined as those labour, service or contract costs that could be fully attributed to an activity.

Indirect costs included owner/operator, family or paid labour from the farm or ranch that was not accounted for in the direct costs. In our analysis, a portion of the farm labour cost was allocated to the lease based first on the proportion of farm/ranch expenses or revenue associated with the respondent’s cattle operations; and, second on the proportion of the Animal Unit Months (“AUMs”)¹ of forage from grazing leases versus all AUMs of forage available to the lease holder. The combination of indirect or allocated farm labour and direct lease costs provides a reasonable picture of the Alberta ranching and farming sector’s in-kind grazing lease holder activities and costs.

¹ An Animal Unit Month is defined as the amount of forage needed by an “animal unit” (AU) grazing for one month. The quantity of forage needed is based on the cow’s metabolic weight, and the animal unit is defined as one mature 1,000 pound cow with or without calf at foot.

More specifically:

- Direct operating expenditures were those annual costs that could be solely attributed to managing the lease, maintaining the grazing capacity and infrastructure, and tending the cattle. Typical operating expenditures incurred by leaseholders include rent, taxes, direct labour, road, fence and corral maintenance; range maintenance; fire protection, and the costs of managing multiple uses and multiple users of the land.
 - Rent includes amounts provided to Alberta for the use of the lands for grazing.
 - Fencing building and maintenance costs were determined using the reported miles of fence built / maintained in a period and the current costs of fence construction.
 - Multiple use costs referred to the time spent or cost of liaising with, managing and responding to other public users of the grazing land – for example, oil and gas interests, recreational users, hunters and others.
- Indirect expenditures included labour that was allocated from the overall farm or ranch operations to the lease operations. The final average labour allocation was based on:
 - First, the proportion of costs related to grazing cattle on all farm or ranch operations. In the case of mixed farming, this allowed separation of cattle costs from other farm costs.
 - Second, the lease area as a proportion of the total farm area. If land area was not available for a respondent, our calculations relied on the proportion of AUMs used on public leased land versus all AUMs of forage available to the farmer or rancher.

To develop a labour cost per person year for farm or ranch owner operators and their families, the total of 2015 family wages and net cash farm income for Alberta beef cattle ranching and mixed farming operations reported by Statistics Canada² was used. This total farm income was divided by the average number of person years worked on the farm as reported by the individual farmers or ranchers to arrive at a cost per person year.

Though the survey collected additional information on overall farm / ranch costs in this analysis only the labour was allocated to the lease operations. This approach recognizes that the labour cost is the most easily identified as being attributed to the lease. Having said that, the allocation of the labour or any other costs to lease operations is an approximation.

² Inflated using the Canada CPI on numbers from Statistics Canada 2011 Farm Financial Survey, Catalogue No. 21F0008X

Exhibit I In-Kind Costs

Item	Direct	Indirect	Other ³
Capital Costs	20 -Year cumulative investment in: <ul style="list-style-type: none"> - Fence building/rebuilding - Range improvement - Building/corral construction - Road construction - Fire protection - Dugout development - Watering system development 		
Annual Operating Costs	<ul style="list-style-type: none"> - Property taxes - Direct labour - Supplemental feed costs - Road maintenance - Fence maintenance - Range maintenance - Fire protection - Multiple use costs 	<ul style="list-style-type: none"> - Person years (including farmer/rancher time) 	<ul style="list-style-type: none"> - Repair and maintenance of buildings, corrals, equipment - Fuel, utility, insurance costs - Interest costs - Leasing costs - Depreciation/amortization of equipment, buildings and corrals

3. Public Grazing Lease Population and Sample Characteristics

Farmers, ranchers and grazing lease associations that operate 1,947 of the public land grazing leases in Alberta were contacted. Their participation in this survey determined the in-kind costs incurred by the industry as part of their 2015 public grazing tenure costs.

Two-hundred and eighty individuals and 28 associations responded, providing data for 461 leases and reflecting the in-kind costs associated with managing 171,681 AUMs of forage capacity on 647,531 acres of leased public land. Both the sample and the response populations are representative of the provincial geographic regions. The objective of this report is to review and summarize the findings. A further breakdown of costs in the Northern and Southern regions of Alberta can be found in section 5.

³ 'Other' describes operating and development costs that support farm and ranch operations, including operations on public grazing leases, but that have not been allocated as indirect in-kind grazing lease costs in this report.

Exhibit II Survey Population, Sample Size and Response Rates

Type of Grazing Lease	Item	Number of Leases	Lease Area (acres)	Lease Capacity (AUMs)
Individual Leases	Population	5,807	4,412,492	1,085,493
	Sample	1,870	1,202,285	297,830
	Responses	428	370,349	100,154
Association Leases	Population	77	789,217	185,899
	Sample	77	789,217	185,899
	Responses	33	277,182	71,527
Total	Population	5,884	5,201,709	1,271,392
	Sample	1,947	1,991,502	483,729
	Responses	461	647,531	171,681

Exhibit III (following page) illustrates the average lease in each sub-population. The average size of association held leases contained in the response group is ten times that of the average individual held lease (8,399 vs. 865 acres). As a result, the associations may have economies of scale in regard to most costs.

The leased held by association that responded to the survey are close in average area and AUM capacity to the population and (8,399 vs. 10,250 acres and 2,167 vs. 2,414 AUMs respectively for the sample group). The individually held leases in the response group are marginally larger than the sample group (865 vs. 643 acres and 234 vs. 159 AUMs respectively). On this basis, both groups of respondents appear representative of the sample and of the population.

Exhibit III Average Sample Grazing Lease Size (Area and AUMs)

		Average Area (acres)	Average AUMs
Average Individual Lease Size	Population	760	187
	Sample	643	159
	Responses	865	234
Average Association Lease Size	Population	10,250	2,414
	Sample	10,250	2,414
	Responses	8,399	2,167

4. Summary of Results, All Respondents

Data received on the 461 individual and association leases represented by respondents⁴ to the survey is summarized in Exhibits IV, V and VI. All costs are calculated per AUM of lease capacity as per the grazing lease records provided by Alberta Environment and Parks.

Exhibit IV summarizes the annualized average 20-year investment costs per AUM of lease capacity for lease holders. The total annualized 20-year investment cost for all lease holders in 2015 is \$9.85 per AUM. This is also reported separately by individuals and associations. Investment costs for individual leaseholders are higher in most categories – notably for fence construction. As noted, grazing association leases are larger in area than leases held by individuals and this difference on costs may reflect the economies of scale. The one exception is range improvement, where associations spent \$3.68 per AUM, \$1.21 per AUM more than individual leaseholders.

Exhibit IV 2015 Annualized 20-Year Investment Costs⁵ for Individual and Association Held Public Land Grazing Leases

Cost Item	Dollars/AUM/Year		
	Individual Leaseholders	Associations	Combined
Fence Built or Rebuilt	\$4.32	\$2.26	\$3.46
Range Improvement	\$2.47	\$3.68	\$2.98
Building/Corral	\$1.32	\$1.22	\$1.28
Road Construction	\$0.31	\$0.09	\$0.22
Fire Protection	\$0.34	\$0.05	\$0.22
Dugout Development	\$0.99	\$0.75	\$0.89
Watering System Development	\$0.76	\$0.38	\$0.60
Other ⁶	\$0.30	\$0.08	\$0.21
Total	\$10.80	\$8.51	\$9.85

⁴ 308 individuals and associations responded to the survey. They reported on the 461 leases that they held.

⁵ Except in the case of fence costs, average annual investment costs have been determined by taking 1/20th of the 20 year total investment reported by respondents. Average annual fence building costs have been determined by multiplying the miles of fence built (as reported by respondents) by an independently determined average 2016 cost of fencing. This was compared to the costs of custom fencing as reported by respondents and found to be representative. The fence costs in 2016 dollars were discounted using CPI to reflect expenditures over the 20 year period.

⁶ Other costs include items such as miscellaneous equipment purchases (brush mowers, water hauling), veterinary costs, salt/minerals, power installations, gates and security, miscellaneous buildings, and fence line clearing.

Exhibit V shows itemized direct annual operating costs reported by individual and association lessees for 2015. As above, costs are expressed in terms of the capacity or the number of allowable AUMs on the lease as per Alberta Environment and Parks records. The total annual average operating cost for all types of lease holders in 2015 is \$29.92 per AUM. Again, favourable economies of scale for the larger association grazing leases may contribute to lower unit costs for fence, road and fire protection, and particularly for labour.

Exhibit V

2015 Itemized Annual Operating Costs for Individual and Association Held Public Land Grazing Leases

Cost Item	Dollars/AUM/Year		
	Individual Leaseholders	Associations	All
Allocated Farm/Ranch or Association Member Labour	\$7.05	\$1.09	\$4.57
Direct Labour	\$1.78	\$5.61	\$3.37
Interest Expense	-	\$0.15	\$0.06
Utilities	-	\$0.09	\$0.04
Fuel	-	\$0.45	\$0.19
Insurance	-	\$0.36	\$0.15
Supplemental feed	-	\$1.34	\$0.56
Building / Corral maintenance	-	\$2.99	\$1.25
Road Maintenance	\$0.75	\$0.21	\$0.52
Fence Maintenance	\$6.54	\$3.71	\$5.36
Range Maintenance	\$5.54	\$2.83	\$4.41
Property Taxes	\$2.36	\$1.53	\$2.01
Multiple-Use	\$3.46	\$0.43	\$2.20
Building / Equipment Lease Cost	\$1.80	\$0.22	\$2.90
Fire Protection	\$0.96	\$0.10	\$0.60
Other ⁷	\$2.42	\$4.98	\$2.98
Total	\$32.66	\$26.08	\$29.92

⁷ Other includes legal, accounting, banking, secretarial and administrative costs including office supplies; member meeting expenses; miscellaneous equipment expenses including solar and windmill power generators; cattle loss (wolves, poison weeds), watering fees; fence line brush control; fly control; fertilizing and spraying (weeds); and, wildlife damage (e.g. beaver dam removal).

While direct labour costs on the association leases are higher (the associations' hired staff provides almost all of the required labour), this is offset on individually held leases by the calculation of allocated labour based on the StatsCan numbers and the estimate of manpower, expenses, revenue and total grazing capacity provided by the owner/operator. In total, individually held leases appear incur about 25% higher average costs than association held leases (\$32.66 versus \$26.08/AUM per year).

Finally, Exhibit VI summarizes the total annual investment and operating costs for individual and association that held grazing leases in 2015. The total 2015 annual investment costs including grazing fees for individual and association held leases, and for all leases combined, are \$46.52, \$39.93 and \$42.52 per AUM respectively.

Exhibit VI

2015 Total Public Land Grazing Costs (In-Kind Costs and Grazing Fees)

Cost Item	Dollars/AUM/Year Reported By		
	Individual Leaseholders	Associations	All
Annualized 20-Year Grazing Lease Investment Costs (Exhibit IV)	\$10.80	\$8.51	\$9.85
Annual Grazing Lease Operating Costs (Exhibit V)	\$32.66	\$26.08	\$29.92
Total Annual In-kind Costs	\$43.46	\$34.59	\$39.77
Provincial Grazing Fees	\$3.05	\$2.34	\$2.75
Total Public Land Grazing Costs	\$46.52	\$36.93	\$42.52

5. Summary of Results, Northern and Southern Alberta

MNP was asked to undertake and report on an analysis of the costs associated with running grazing leases in Northern as compared to Southern Alberta. For this we defined North as those grazing leases found in grazing rental zone C, while South constitutes grazing rental zones A and B (Appendix C contains a map of the grazing rental zones). We excluded two individual observations as their location could not be determined. For this reason, the tables in this section are not immediately comparable to those in the previous section. Exhibit VII and VII show the breakdown of the two populations in terms of acres and AUMS of lease capacity. The population, sample and responses from both regions are similar in terms of numbers or leases. The Southern leases cover a larger area and proportionately more AUMs than the Northern leases. Association held leases in the North and South are very similar both in size and AUM capacity on the aggregate level.

Exhibit VII
Survey Population, Sample Size and Response Rates for Individual Held Leases

Population Category	Item	Number of Leases	Lease Area (acres)	Lease Capacity (AUMs)
North	Population	2,858	1,615,013	360,727
	Sample	1,082	668,370	149,643
	Responses	222	162,067	36,188
South	Population	2,949	2,797,479	724,766
	Sample	788	533,915	148,187
	Responses	206	208,282	63,966
Overall	Population	5,807	4,412,492	1,085,493
	Sample	1,870	1,202,285	297,830
	Responses	428	370,349	100,154

Exhibit VIII
Survey Population, Sample Size and Response Rates for Association Held Leases

Population Category	Item	Number of Leases	Lease Area (acres)	Lease Capacity (AUMs)
North	Population	32	277,566	70,741
	Sample	32	277,566	70,741
	Responses	15	142,016	35,649
South	Population	45	511,651	115,158
	Sample	45	511,651	115,158
	Responses	18	135,167	35,878
Overall	Population	77	789,217	185,899
	Sample	77	789,217	185,899
	Responses	33	277,182	71,527

Exhibit IX shows that individual leases held by respondents from the South are 38% larger in area and have a 90% higher AUM capacity than Northern leases included in the responses. Association responses are more consistent, with the Northern leases actually being 25% larger in size and having 20% higher AUM capacity.

Exhibit IX
Average Sample Grazing Lease Size for Individual Held Leases (area and AUMs)

		Individual Held Leases		Association Held Leases	
		Average Area (acres)	Average AUMs	Average Area (acres)	Average AUMs
Average Northern Lease Size	Population	565	126	8,674	2,211
	Sample	618	138	8,674	2,211
	Responses	730	163	9,468	2,377
Average Southern Lease Size	Population	949	246	11,370	2,559
	Sample	678	188	11,370	2,559
	Responses	1,011	311	7,509	1,993

Based on the data available and our analysis, Northern individual leaseholders responding to the survey reported an average of \$14.33/ AUM of leas capacity in annualized investment costs (Exhibit X). This compares to \$8.83/AUM per year for Southern leases. The difference is mainly in the higher fence building and range improvement costs (collectively \$10.96/AUM per year in the North vs. \$4.45/AUM per year in the South). Fencing costs appear similar for Northern and Southern associations, however the difference in range improvement costs persists. Northern leases may experience higher range development costs due to a greater and more recent investment in land clearing.

Exhibit X
2015 Annualized 20-Year Investment Costs for Individual and Association Held Public Land Grazing Leases in Northern and Southern Alberta

Cost Item	Dollars/AUM/Year Individually Held Leases		Dollars/AUM/Year Association Held Leases		Dollars/AUM/Year Combined	
	North	South	North	South	North	South
Fence Built or Rebuilt	\$5.56	\$3.62	\$2.65	\$1.87	\$4.11	\$2.99
Range Improvement	\$5.40	\$0.83	\$5.21	\$2.17	\$5.30	\$1.31
Building/Corral	\$0.76	\$1.63	\$1.04	\$1.39	\$0.90	\$1.54
Road Construction	\$0.43	\$0.24	\$0.08	\$0.10	\$0.25	\$0.19
Fire Protection	\$0.22	\$0.40	\$0.06	\$0.04	\$0.14	\$0.27
Dugout Development	\$1.06	\$0.94	\$0.71	\$0.79	\$0.89	\$0.89
Watering System Development	\$0.33	\$1.01	\$0.44	\$0.33	\$0.38	\$0.76
Other	\$0.56	\$0.16	\$0.14	\$0.02	\$0.35	\$0.11
Total	\$14.33	\$8.83	\$10.33	\$6.70	\$12.33	\$8.06

For individual leases in the North respondents reported higher operating costs, than Southern respondents (\$41.88/AUM/year versus \$27.48/AUM/year – Exhibit XI). As with investment costs, the difference is driven in part by fencing and range maintenance. There is an additional significant allocation of labour costs. Collectively the total direct in-kind lease costs are \$29.62/AUM/year in the North and \$13.26/AUM/year in the South.

While both allocated labour costs and fencing costs are similar between Northern and Southern associations, the difference in range maintenance costs is consistent. Two costs that are consistently higher for Southern farmers are property taxes and building / equipment leases.

Exhibit XI
2015 Itemized Annual Operating Costs for Individual and Association Held
Public Land Grazing Leases in Northern and Southern Alberta

Cost Item	Dollars/AUM/Year Individually Held Leases		Dollars/AUM/Year Association Held Leases		Dollars/AUM/Year Combined	
	North	South	North	South	North	South
Allocated Farm/Ranch or Association Member Labour	\$10.96	\$4.91	\$1.20	\$0.98	\$6.10	\$3.50
Direct Labour	\$1.93	\$1.69	\$3.56	\$7.64	\$2.74	\$3.83
Interest Expense	-	-	\$0.29	\$0.00	\$0.15	\$0.00
Utilities	-	-	\$0.17	\$0.01	\$0.09	\$0.00
Fuel	-	-	\$0.48	\$0.43	\$0.24	\$0.15
Insurance	-	-	\$0.39	\$0.33	\$0.19	\$0.12
Supplemental Feed	-	-	\$1.59	\$1.09	\$0.79	\$0.39
Building / Equipment Lease Costs	-	-	\$1.30	\$4.67	\$0.65	\$1.68
Road Maintenance	\$0.82	\$0.68	\$0.24	\$0.18	\$0.53	\$0.50
Fence Maintenance	\$9.35	\$4.94	\$3.63	\$3.78	\$6.50	\$4.52
Range Maintenance	\$9.31	\$3.41	\$4.46	\$1.20	\$6.90	\$2.62
Property Taxes	\$1.80	\$2.67	\$1.37	\$1.69	\$1.59	\$2.32
Multiple-Use	\$2.97	\$3.72	\$0.55	\$0.32	\$1.76	\$2.50
Building / Equipment Lease Costs	\$1.56	\$1.94	\$0.09	\$0.35	\$0.83	\$1.36
Fire Protection	\$0.73	\$1.10	\$0.13	\$0.07	\$0.43	\$0.73
Other	\$2.44	\$2.42	\$5.14	\$4.81	\$3.79	\$3.28
Total	\$41.88	\$27.48	\$24.61	\$27.55	\$33.28	\$27.50

The overall annualized investment and operating costs associated with grazing leases in the North and South are \$47.52/AUM/year and \$38.92/AUM/Year respectively (Exhibit XII). On this basis Northern lessees incurred 22% higher costs than Southern lessees. Some of this difference may be driven by a difference in scale. Overall association costs are similar for the two regions. However, we recognize that farmers in Northern and Southern Alberta may face different cost constraints, such as for instance higher range maintenance costs in the north and higher property taxes in the south. It is also important to note that Northern leaseholders currently pay lower grazing fees than those who operate in the South.

Exhibit XII
2015 Total Public Land Grazing Costs (In-Kind Costs and Grazing Fees)
In Northern and Southern Alberta

Cost Item	Dollars/AUM/Year Individually Held Leases		Dollars/AUM/Year Association Held Leases		Dollars/AUM/Year Combined	
	North	South	North	South	North	South
Annualized 20-Year Grazing Lease Investment Costs (Exhibit III)	\$14.33	\$8.83	\$10.33	\$6.70	\$12.33	\$8.06
Annual Grazing Lease Operating Costs (Exhibit IV)	\$41.88	\$27.48	\$24.61	\$27.55	\$33.28	\$27.50
Total Annual In-Kind Costs	\$56.20 ⁸	\$36.30	\$34.93 ⁹	\$34.25	\$45.61 ¹⁰	\$35.56
Provincial Grazing Fees	\$1.62	\$3.84	\$2.20	\$2.48	\$1.91	\$3.35
Total Public Land Grazing Costs	\$57.83	\$40.14	\$37.13	\$36.73	\$47.52	\$38.92

⁸ Total costs for Northern and Southern individual leaseholders are statistically different at the 1% level.

⁹ Total costs for Northern and Southern association leaseholders are not statistically different

¹⁰ Total costs for Northern and Southern leaseholders overall are statistically different at the 1% level – however this difference is wholly explained by the difference in costs for individual leaseholders.

6. Weight Gain and Distance to Markets

Exhibit XIII summarizes much of the non-financial data¹¹ collected through the survey. The numbers follows a similar pattern. Associations are quite consistent both in terms of market distance and weight gain. Southern individual lease holders reported weight gain and distance to markets that were marginally different from the North.

Exhibit XII Weight Gain and Distance to Markets

Area	Variable	Individual	Association
North	Distance to Market (km) Spring	164 km	172 km
	Fall	232 km	172 km
	Average daily weight gain (lbs) while on the lease	1.71 lbs/day	1.70 lbs
South	Distance to Market (km) Spring	102 km	189 km
	Fall	104 km	189 km
	Average daily weight gain (lbs) while on the lease	2.06 lbs/day	1.73 lbs/day
Overall	Distance to Market (km) Spring	135 km	180 km
	Fall	170 km	180 km
	Average daily weight gain (lbs) while on the lease	1.88 lbs/day	1.72 lbs/day

7. Data Testing and Statistical Interpretation

Reasonableness tests were performed on each individual's or association's submission. The tests included:

- Reviewing key line items and testing reasonableness by line item across all responses to assess consistency.
- Further follow-up with individuals or association personnel where appropriate.
- Testing the AUM total used in developing unit costs.

Basic statistical tests were also conducted to assess the reliability of the estimates and to further analyze the data and results. Relying on the variation of the weighted-average prices, a confidence interval was

¹¹ Not all respondents included distance to market and average daily weight gain. The data in the above table is based on the subset of our respondents (50%, 94% and 43% of all respondents for distance to market in the spring and fall, and weight gain, respectively) that included the information in their survey responses.

calculated at the 95 percent level. The interpretation of the confidence interval is that 95 percent of the time the true mean will lay within the calculated confidence interval for the sample mean. For the average total public land grazing costs for all leases not including lease costs (\$39.77 per AUM), the confidence interval is between \$35.69 and \$44.03 per AUM.

The coefficient of variation was calculated to be 5%. The coefficient of variation is a standardized or normalized form of expression that can be used to indicate the relative reliability of the estimated weighted averages presented. The coefficient of variation calculated indicates that the estimated weighted averages are a good representation of the data. Additional explanation and values of the tests are provided in Exhibit XIV.

Exhibit XIV
Meaning, Application and Values for the Statistical Tests Used

Test	Meaning and Application		
Variance	A measure of the spread or dispersion of a set of data around an expected value in an absolute sense.		
Confidence Interval	An estimated range of values which is likely to include an estimated population parameter, such as a population mean, at a given probability level.		
Coefficient of Variation	A measure of the spread or dispersion of a set of data as a proportion of its mean, usually expressed as a percentage.		
Values, Total Annual In-kind Costs			
Test	North	South	All
Variance	\$6.70	\$8.09	\$4.44
95% Confidence Interval	\$40.49 – \$50.74	\$29.80 - \$41.06	\$35.69 - \$44.03
Coefficient of Variation	6%	8%	5%

Appendix A – Individual Grazing Lease Survey

Part 1—General Background Data

Note that all the data collected will be treated as confidential. Thank you in advance for your participation and input.

Leaseholder name: _____ Contact phone number: _____
 Contact name: _____ Contact email address: _____
 Leasing Zone (if known): ___ Zone A1 ___ Zone A2 ___ Zone B ___ Zone C

Part 2—Total Farm Information (includes owned, leased and rented areas)

This Total Farm Information section of the survey is used to report information and the expenses that you incurred in your farming activities in 2015. These costs will be allocated by MNP LLP to your public grazing lease(s) based on the information that you provide. In this survey, Total Farm costs are those expenditures that relate to many activities and that cannot be easily split into or identified with a single aspect of your farm. These costs may include expenses related to the overall management, coordination and operation of the farm.

(a) Total Farm Data (inclusive of Crown Grazing Lease):

Total grazing AUMs operated in 2015: _____ AUMs Total area of farm operation in 2015: _____ Acres
 Kind and class of animals grazing AUMs: _____ % of total farm revenue from cattle:* _____ %
 How far do you transport cattle to the market in the fall? _____ Km % of total farm expenses from cattle: _____ %
 How far do you transport cattle from the market in the spring? _____ Km
 Do you operate an integrated feedlot operation?* ___ Yes ___ No

* If you operate an integrated feedlot operation, please provide the % of total farm revenue that you would have received from all cattle had you sold them prior to entering a feedlot.

(b) Total Farm data on labour and other farm costs for 2015 (information in this Section should reflect the costs attributed to the Total Farm):

Total person years** worked: _____ Years Interest costs (loans for capital equip. & farm buildings, corrals or other capital improvements only - exclude all farm land and residences): \$ _____
 Total repairs and maintenance (buildings, corrals, equipment, etc.): \$ _____ Marketing costs (costs deducted from sales proceeds to cover commission and inspection fees associated with selling cattle): \$ _____
 Total supplemental feed costs while cattle are not on Crown grazing leases (purchased or produced): \$ _____ Depreciation & amortization*** of equipment costs: \$ _____
 Total fuel costs: \$ _____ Depreciation & amortization*** of building and corral costs: \$ _____
 Total utilities costs: \$ _____ Building and/or equipment licensing costs \$ _____
 Insurance costs: \$ _____

** For example the farm owner works 12 months (full-time), a paid labourer works 12 months and a child works 6 months, the total person years worked in 2015 would equal 2.5 years. One person year assumes 40 hours of work per week. If a person worked 80 hours per week, this is equivalent to 2 person years.

*** CCA (Capital Cost Allowance) may be used in lieu of Depreciation & Amortization.

Part 3—Public Land Grazing Lease Information

(a) Public grazing lease identification, capacity and proximity to your farm:

Lease number(s) (please list all leases held in 2015): _____ Total lease area held in 2015: _____ Acres
 Average distance that the lease(s) is (are) from the farm headquarters: _____ Km
 Total allowable AUMs under terms of lease(s) held in 2015: _____ AUM Total AUMs grazed on the lease(s) in 2015: _____ AUM

(b) Lease acquisition costs (choose relevant categories as appropriate)**:**

Total cost of acquiring these leases through government allocation or tender: \$ _____
 Total cost of government assignment fees paid to acquire these leases: \$ _____

(c) Expected weight gain for a yearling grazed on public leases:

Number of days that livestock are typically on the lease: _____ Days / Year
 Expected weight gain of yearlings while on the lease***** (see definitions): _____ lbs gained / day

(d) Of the person years spent on public land grazing leases what percent was:

Spent on cattle operations? (i) _____ % ... what percent of the time spent on cattle operations was owner/manager time? (0-100%) _____ %
 Spent on multiple use***** activities? (ii) _____ % ... what percent of the time spent on multiple use activities was owner/manager time? (0-100%) _____ %
 (i + ii) = 100%

**** Consider lease acquisition costs incurred over the past 25 years

***** If no yearlings are grazed, please make a best estimate or indicate 'n/a'.

***** Note that the paid and owner/manager time, and the direct costs spent on multiple use is intended to capture the additional cost that you may incur liaising with, managing and responding to the requirements of other users on the leased lands (i.e. grazing lease administration activities, seismic, oil & gas, recreation, hunters, etc.). This may be the time and cost of managing these interests or of mitigating their impact on your grazing lease operations.

Part 4— Capital Costs (Costs incurred over the last 20 years and not included in Part 2 or 3)

The "Lease Investment Costs" refer to the financial investment made in your public grazing lease(s) to make them suitable for grazing cattle. These would be investments that typically have a useful life of greater than one year and that may require some level of ongoing maintenance. Note that the ongoing maintenance costs are captured in Part 5 - Annual Direct Public Land Grazing Lease Operating Costs.

For leases held in 2015 (listed above), describe the investments made in improvements to your public grazing lease(s) **over the past 20 years**.

If you purchased a lease in the past 20 years, what would your estimate be of the value of the improvements at the time of purchase? \$ _____

Other improvement costs incurred within the last 20 years:

Range improvement costs:	\$ _____	Fire protection costs:	\$ _____
Building/corral costs:	\$ _____	Dugout development cost:	\$ _____
Road construction costs:	\$ _____	Watering system development cost:	\$ _____
Total miles of fence built or rebuilt:	_____ miles		

In recent years, what would the average cost per mile of custom fence be for the lease? _____ \$ / mile

Other costs (identify cost type):

(1) _____	\$ _____
(2) _____	\$ _____
(3) _____	\$ _____

Part 5—2015 Annual Direct Public Land Grazing Lease Operating Costs

The costs that are incurred on an annual or near annual basis in the operation of the public grazing lease are captured in this "Annual Direct Public Land Grazing Lease Operating Costs" section of the survey. These are direct expenditures that you make each year in order to operate on your public land grazing lease(s).

Note that the paid time and other direct costs spent on multiple use is intended to capture the additional cost that you may incur liaising with, managing and responding to the requirements of other users on the leased lands. This may be the time and cost of managing these interests or of mitigating their impact on your grazing lease operations.

Public grazing lease rental payment:	\$ _____	Property taxes:	\$ _____
Any direct hired labour not included in Part 2:	\$ _____	Multiple use costs*:	\$ _____
Road maintenance:	\$ _____	Building and/or equipment rental costs:	\$ _____
Range maintenance (seeding & weed/brush control):	\$ _____	Fire protection costs:	\$ _____

Miles of fence maintained:	_____ miles	Other costs (identify cost type):	
In recent years, what would the average cost per mile of fence maintenance for the lease?		(1) _____	\$ _____
	_____ \$ / mile	(2) _____	\$ _____
		(3) _____	\$ _____

* Multiple use refers to the direct cost of liaising with, managing and responding to other public land users - i.e. seismic, oil & gas, recreation, hunters, etc.

Part 6—Survey Submission and Questions

Should you have any questions regarding the survey, please feel free to contact Knut Ulsrud at (780) 733-8669. If we have any questions regarding the information you provide, we will need to contact you. Please email, fax or mail your response to MNP LLP no later than **May 20, 2016**. Complete contact information for MNP LLP in Edmonton can be found below.

Thank you for your cooperation.

MNP LLP	Email: knut.ulsrud@mnp.ca
Attention: Knut Ulsrud	Office: 780.733.8669
Suite 1600	Fax: 780.454.1908
10235 101 Street NW	
Edmonton, Alberta	
T5J 3G1	

Appendix B – Association Grazing Lease Survey

Part 1—General Background Data

In order to assist in identification, grazing lease costs must be listed by grazing lease owner and public land grazing lease number. We would ask that you keep a hard copy or other record of your response and all back-up information and data.

Note that all the data collected will be treated as confidential. Thank you in advance for your participation and input.

Leaseholder name: _____ Contact phone number: _____
Contact name: _____ Contact email address: _____
Leasing Zone (if known): ___ Zone A1 ___ Zone A2 ___ Zone B ___ Zone C

Part 2—Public Land Grazing Lease Information

(a) Public grazing lease identification, capacity and distance to members' farms and markets:

Lease number(s) (please list all leases held in 2015): _____

Total allowable AUMs under terms of lease(s) held in 2015: _____ AUM
Total AUMs grazed on the lease(s) in 2015:* _____ AUM
Average distance that the lease(s) is (are) from the member farm headquarters: _____ KM
Total lease area: _____ Acres
To the extent that you are aware, what is the distance to most commonly used cattle market in the fall: _____ Km

To the extent that you are aware, what is the distance to most commonly used cattle market in the spring: _____ Km

**If the area included deeded land, please allocate the total AUMs to the leased land based on the proportion of area.*

(b) Lease acquisition costs (choose relevant categories as appropriate)

Total cost of acquiring these leases through government allocation or tender: \$ _____
Total cost of government assignment fees paid to acquire these leases: \$ _____

(c) Expected weight gain for a yearling grazed on public leases:

Number of days that livestock are typically on the lease: _____ Days / Year
Expected weight gain of yearlings while on the lease (see definitions): _____ lbs gain / day

Part 3—Public Land Grazing Lease Investment Costs

The "Lease Investment Costs" refer to the financial investment made in your public grazing lease(s) to make them suitable for grazing cattle. These would be investments that typically have a useful life of greater than one year and that may require some level of ongoing maintenance. Note that the ongoing maintenance costs are captured in Part 4 - Annual Direct Public Land Grazing Lease Operating Costs.

For leases held in 2015 (listed above), describe the investments made in improvements to your public grazing lease(s) over the past 20 years:

If you purchased a lease in the past 20 years, what would your estimate be of the value of the improvements at the time of purchase? \$ _____

Other improvement costs incurred within the last 20 years:

Range improvement costs: \$ _____ Fire protection costs: \$ _____
Building/corral cost: \$ _____ Dugout development cost: \$ _____
Road construction cost: \$ _____ Watering system development cost: \$ _____

Total miles of fence built or rebuilt: _____ miles
What would the current average cost per mile of custom fence be for the lease? _____ \$ / mile

Other costs (identify cost type):

(1) _____ \$ _____
(2) _____ \$ _____
(3) _____ \$ _____

Part 4—2015 Annual Direct Public Land Grazing Lease Operating Costs

The costs that are incurred on an annual or near annual basis in the operation of the public grazing lease are captured in this "Annual Direct Public Land Grazing Lease Operating Costs" section of the survey. These are direct expenditures that you made in the 2015 fiscal year in order to operate on your public land grazing lease(s).

Note that the paid and donated time, and direct costs spent on multiple use is intended to capture the additional cost that you may incur liaising with, managing and responding to the requirements of other users on the leased lands. This may be the time and cost of managing these interests or of mitigating their impact on your grazing lease operations.

Public lease rental payment:	\$ _____	Range maintenance (seeding & weed/brush control):	\$ _____
Building and/or equipment lease costs:	\$ _____	Marketing costs (associated with selling cattle):	\$ _____
Donated time by association members:	_____ days	Supplemental feed costs:	\$ _____
% of donated time spent on cattle operations:	(i) _____ %	Property taxes:	\$ _____
% of donated time spent on multiple use*:	(ii) _____ %	Interest expense (loans for capital equip. & farm buildings only):	\$ _____
	$(i+ii) = 100\%$		
Total paid labour & benefits:	\$ _____	Multiple use* costs:	\$ _____
% of paid labour time spent on cattle operations:	(i) _____ %	Depreciation & amortization:	\$ _____
% of paid labour time spent on multiple use*:	(ii) _____ %	Insurance costs:	\$ _____
	$(i+ii) = 100\%$		
Building/Corral maintenance:	\$ _____		
Utilities costs:	\$ _____		
Building and/or equipment licensing costs:	\$ _____	Other costs (identify cost type):	
Fuel costs:	\$ _____	(1) _____	\$ _____
Road maintenance:	\$ _____	(2) _____	\$ _____
Fire protection costs:	\$ _____	(3) _____	\$ _____
Miles of fence maintained:	_____ miles	(4) _____	\$ _____

* Multiple use refers to the time spent or cost of liaising with, managing and responding to other public land users - i.e. seismic, oil & gas, recreation, hunters, etc.

Part 5—Survey Submission and Questions

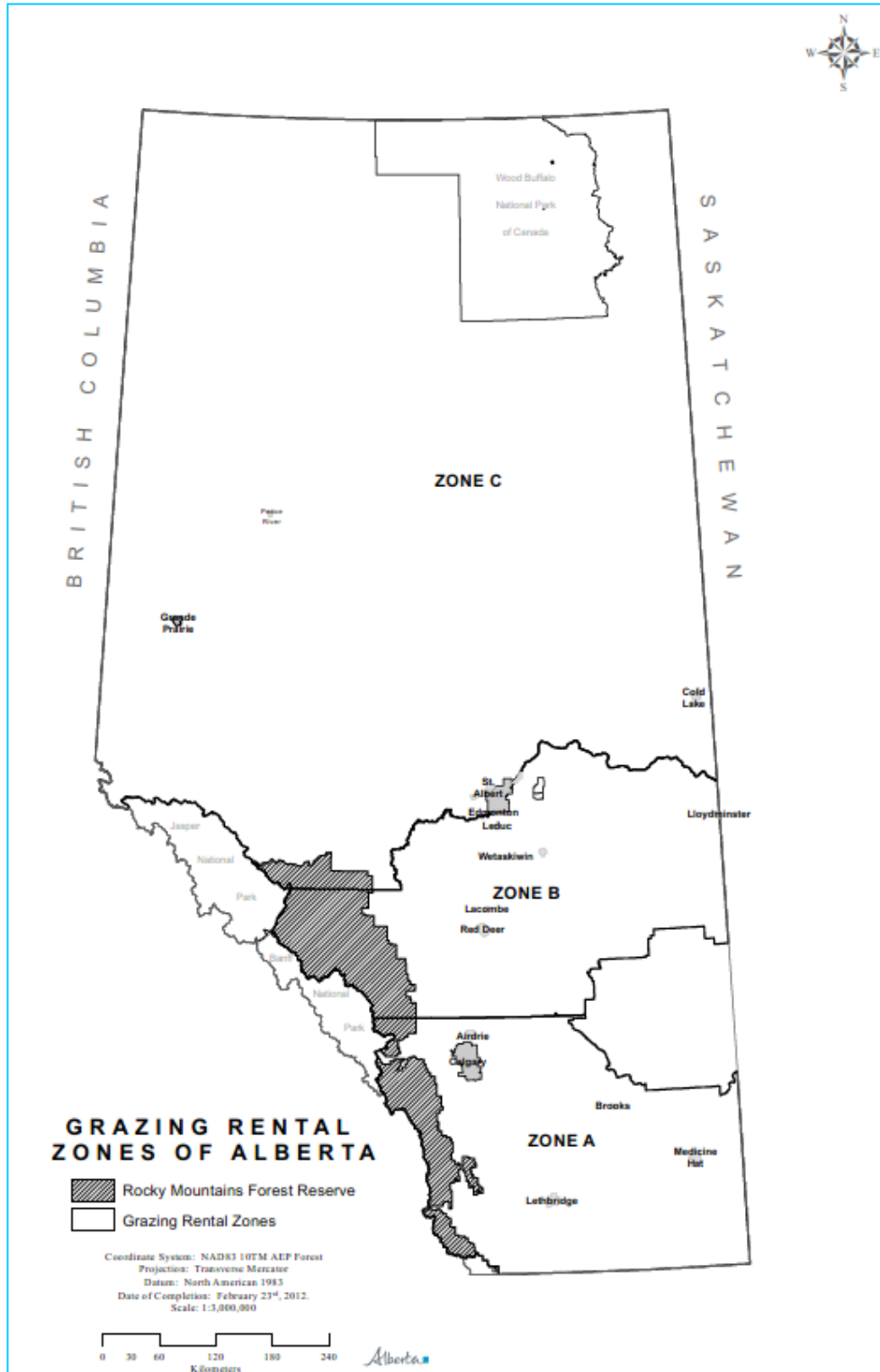
Should you have any questions regarding the survey, please feel free to contact Knut Ulsrud at (780) 733-8669. If we have any questions regarding the information you provide, we will need to contact you. Please email, fax or mail your response to MNP LLP no later than **May 20, 2016**. Complete contact information for MNP LLP in Edmonton can be found below.

Thank you for your cooperation.

MNP LLP
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 10235 101 Street NW
 Edmonton, Alberta
 T5J 3G1

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Appendix C – Grazing Lease Rental Zones Map





ABOUT MNP

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