1. PROJECT RATIONALE:

Grasslands are rare, unique, life-sustaining ecosystems that house a great diversity of plants, animals and insects. More than 30% of British Columbia’s threatened or endangered species depend on grasslands for their survival. BC’s grasslands represent less than 1 percent of the provincial land base and are one of Canada’s most endangered ecosystems.

Despite the significance of BC’s grasslands as an endangered ecosystem, the province does not currently have adequate information and a clear provincial picture on the abundance, distribution and status of its grasslands. This lack of baseline information that can assist resource, wildlife and range managers, and industry in achieving sustainable land management practices puts into question the long-term sustainability of BC’s grasslands. With ever increasing pressures on a relatively small land base, managers, decision makers and industry need to be able to strategically and effectively address key issues and threats to grasslands, such as forest encroachment, non-native invasive plants, subdivision of agricultural lands, inappropriate grazing practices, abusive recreation and urban expansion. As the Cariboo Forest Region contains roughly 30% of the provincial total of grasslands, these issues are as prevalent here as anywhere else in the province.

The BC Grasslands Conservation Risk Assessment is compiling existing information (inventories) from around the province to assess the status of BC’s grasslands and their resident wildlife. The Assessment is building a comprehensive grasslands Geographic Information System (GIS) with all necessary information layers to identify, analyze and model grasslands across BC, specifically those considered threatened or at risk. This provincial project fills a critical need and will provide solid baseline information to landscape planners and decision makers in the public and private sector for the development of effective grassland conservation management plans. An assessment of BC’s grasslands is long overdue and is supported by all interests including the ranching industry.

2. PROJECT GOALS:

The goal of the BC Grasslands Conservation Risk Assessment is to identify priority grassland habitats most in need of conservation, stewardship and restoration efforts. To this end, the immediate goal is to compile existing information (inventories) for the creation of a grasslands GIS with all necessary data layers to identify, analyze and model BC’s grasslands, specifically those considered threatened or at risk. The GCC has already compiled the base grassland ecosystem and land status data layers. As a result, the GCC has determined the amount of native grasslands that remain in BC along with their associated land status and range tenure information. Grassland, land status and range tenure statistics for the Cariboo can be found in Appendix 1.

The main goal of the Risk Assessment will be realized through the compilation of the final layers of the GIS (i.e. historical distribution of grasslands, species at risk, non-native invasive plant distribution & recreational sites), and the use of all data layers to identify
priority grassland areas. The Assessment will reach its goal by answering the following questions:

1) How many hectares of grasslands have been lost to cultivation, urbanization, forest encroachment and non-native invasive plants?
2) What types of grasslands occur in BC and where do they occur?
3) What species at risk are associated with grasslands and where are they located?
4) What are the current and potential threats to grasslands?
5) What grasslands are considered threatened or at risk?
6) What are the priority areas for conservation, restoration and stewardship?

3. PROGRESS TO MARCH 31, 2003: ACTIVITIES IN THE CARIBOO:

Completion of Land Status and Range Tenure Overlays:
- Completed land status overlays for all grassland coverages in the Cariboo Forest Region. Land status overlays include: private, crown and federal lands; Indian Reserves, parks and protected areas; Agricultural Land Reserve; lands acquired by conservancy groups (e.g. The Land Conservancy, The Nature Trust of BC); regional districts; and municipal boundaries.
- Completed range tenure overlays for all grassland coverages in the Cariboo Forest Region. Range tenure overlays include grazing licenses, permits and leases.

Finalization of Grassland Coverages, Metadata and Documentation:
- Made final edits and standardized all grassland coverages in the Cariboo Forest Region. Also standardized all project workspaces.
- Developed and attached detailed metadata to all grassland coverages, including source data description, updates, comments and other information.
- Developed and attached detailed documentation on the mapping process for all grassland coverages. This documentation is in Microsoft Word format and includes mapping rationale, Arc Macro Languages (AMLs) and other procedures, coverage attribute definitions and values, and other information.

Completion of Phase 1 Historical Grasslands Mapping:
- Phase 1 historical mapping is complete for the 100 Mile House, Williams Lake and Chilcotin Forest Districts. This mapping has identified the amount of native grasslands lost to urban and agricultural development within the Natural Disturbance Type 4 (NDT4) valley bottoms of the Cariboo Region.
- Preliminary results indicate that approximately 10% of the Cariboo’s native grasslands have been lost to development.

GIS Modeling of Grasslands Considered Threatened or at Risk:
- Prepared for and held a GCC workshop: Identifying Grasslands at Risk for GIS Modeling of Priority Areas. The goal of this workshop was to identify criteria that would enable the modeling of grasslands considered threatened or at risk. This modeling would generate a map that GCC partners and other
organizations could use to focus their efforts on priority grassland areas and develop appropriate management strategies.

- Based on data currently available in the grasslands GIS, began preliminary modeling work on the priority areas and threats identified during the workshop. Priority threats identified include urbanization, non-native invasive plants, cultivation and forest encroachment.

**Communication and Extension of Grasslands Mapping:**

- Developed grassland maps for the Cariboo Forest Region to be posted to the GCC website for user viewing and downloads.
- Sent hard copy maps, grassland statistics and mapping information to various individuals and organizations in the Cariboo involved in grasslands education, communications, research, monitoring, conservation and stewardship.

**Characterization of Cariboo Grasslands:**

- Established a contract for the characterization of BC’s grasslands. This will produce a comprehensive and consolidated ecological description of the province’s grasslands to accompany the Mapping Project. The extensive grasslands of the Cariboo will be described in detail in this report.

**Development of Workplan, Tasks and Activities for Year 4 of the Project:**

- Together with the Technical Review Committee, developed a plan for the incorporation of the final layers of the grasslands GIS, namely observed species at risk locations, non-native invasive plant distribution, high use recreation sites and priority grasslands layer.
- Developed a strategy to determine loss of grassland to forest encroachment. This strategy will include a three part process:
  1. identifying rate of change through point sampling on air photos and subsequent extrapolation.
  2. development of communication and extension tool to illustrate encroachment issue in the Cariboo and the extension of this to other major grassland areas.
  3. creation and testing of algorithm(s) to predict where encroachment has occurred based on a combination of Forest Cover data, slope, aspect, Biogeoclimatic zonation, air photos and local expertise.

4. **YEAR 4 TASKS & ACTIVITIES (APRIL 1, 2003 – MARCH 31, 2004):**

1. Identify the historical distribution of grasslands for all regions through inventory analysis. This will entail the finalization of Phase 1 mapping and the completion of the forest encroachment analyses identified in section 3 above.
2. Incorporate into the grasslands GIS available data on species at risk locations, non-native invasive plant distribution and high use recreational areas.
3. Complete the analysis and modeling of BC’s grassland habitats considered threatened or at risk. This will assist with the prioritization of specific grassland habitats (see 4. below).
4. Identify and prioritize specific grassland ecosystems which are most threatened by urbanization, cultivation, non-native invasive plants, inappropriate grazing management practices, abusive recreation and subdivision of agricultural land (current and potential threats).

5. Describe and characterize the different grassland types found in each region of the province. Compile existing classification information from each region and develop a strategy to complete a provincial grasslands classification system.

6. Finalize strategy and plan to assess grassland condition and determine seral stage distribution for BC’s grasslands by region.

7. Perform final statistical analysis to determine: total hectares of grasslands; historical distribution; land status and tenure (including: private land, provincial crown land, federal lands, Indian reserve, grazing leases, grazing licenses and permits, parks and protected areas, Agricultural Land Reserve, regional districts, municipalities); current and potential threats to grasslands (level of threat, type of threat); grasslands lost to cultivation, urbanization, forest encroachment and non-native invasive plants; grasslands considered sensitive or at risk (priority grasslands); observed species at risk locations.

8. Complete the BC Grasslands website with all appropriate GIS information: distribution and abundance of grasslands; characterization of BC’s grasslands (spatially represented where available); grassland parks and protected areas; historical distribution of BC’s grasslands; grasslands lost to cultivation, urbanization, forest encroachment and non-native invasive plants; grassland habitats considered sensitive or at risk (priority grasslands); locations of species at risk (this information will be linked to the Understanding Grasslands section of the GCC website which describes the habitat requirements for each species); current and potential threats to grasslands (type & level of threat); land status and tenure information.

9. Finalize maintenance strategy for grasslands GIS. Establish all necessary links with GCC and provincial websites.

10. Develop BC Grasslands Conservation Risk Assessment final report (includes extension) and list of recommendations for conservation, restoration and stewardship action on priority grasslands.

5. YEAR 4 DELIVERABLES:

- BC Grasslands Conservation Risk Assessment final report.
- BC Grasslands Conservation Risk Assessment final statistical report.
- Characterization of BC’s Grasslands final report.
- Access to provincial grasslands database. This database will be accessible through the BC Grasslands website and through provincial ministry website servers. These sites will allow access to all grasslands information and GIS data.
- Strategy and plan to assess grassland condition and determine seral stage distribution for BC’s grasslands by region.
- Website (www.bcgrasslands.org) with all GIS information available in map, statistical and report form.
- Press releases and articles for newspapers, magazines, organization newsletters, and TV: including CBC, BCTV, The Vancouver Sun, Beef in BC, Country Life in BC, and NGO newsletters.

6. BENEFITS:

The BC Grasslands Conservation Risk Assessment will provide an effective tool and the most comprehensive source of quantitative grasslands data and information available in BC. In turn, this information will improve all aspects of land use management, planning and decision-making in the Cariboo Region.

✓ Natural Resource Management
The BC Grasslands Conservation Risk Assessment addresses Natural Resource Management needs in the Cariboo by:
- Producing and making available critical information about the abundance, distribution, and status of grasslands to the agricultural industry;
- Increasing awareness and understanding about grasslands and related land use/management issues among industry, government, and non-government organizations;
- Providing a useful tool for government, non-government organizations (such as the BC Cattlemen’s Association) and industry to achieve effective and sustainable management of grasslands and to ensure the conservation of the Cariboo’s range resources;
- Improving ability to define, target and effectively address priority grassland issues;
- Increasing ability to identify priority areas for conservation, stewardship, research, communication and extension;
- Forging new partnerships and developing new opportunities for stewardship, education and applied research;
- Enabling the GCC to work cooperatively and in partnership with the Society for Range Management, BC Cattlemen’s Association and ranchers to address concerns over wildlife habitat and the long-term sustainability of the Cariboo’s grasslands.

✓ Land Use Planning and Decision Making
The BC Grasslands Conservation Risk Assessment addresses Land use Planning and Decision-Making by:
- Allowing for more informed planning and decision-making, as well as more informed policy and management initiatives.
- Providing baseline information to planning and policy initiatives, and decision-making processes:
  o Land status: ownership and range tenure
  o Spatial distribution of grasslands: types of grasslands and where they occur.
  o Spatial distribution of grasslands that are on private land, First Nations land, Agricultural Land Reserve (ALR), and grasslands that are within
regional districts and municipal boundaries (size, shape, connectivity of parcel; and density of settlement). Determining how their landscape context affects conservation and planning initiatives.

- Spatial distribution of rare and unique grasslands.
- Species at risk locations and their habitats (e.g. wetlands, aspen copses, riparian areas, pockets of Douglas Fir surrounded by grasslands, etc)
- Historical extent of grasslands and how much has been lost to cultivation, urbanization, forest encroachment and non-native invasive plants.
- Current and potential threats to grasslands and identification of priority areas for conservation, restoration and stewardship.

- Contributing to meeting the goals and objectives of Land and Resource Management Plan (LRMP) processes and other land use planning initiatives.

✔ **Communication & Partnerships**
- The BC Grasslands Conservation Risk Assessment will improve communication, access and exchange of grassland related information between industry, government organizations (federal, provincial, municipal & regional districts), environmental organizations, First Nations, academic institutions, and other groups;
- Assist in establishing new partnerships and developing opportunities for discussion on important grassland management, conservation and stewardship issues. Only through partnerships will we effectively achieve sustainability and the conservation of grasslands.

7. **LINK TO CARIBOO-CHILCOTIN GRASSLANDS STRATEGY AND WORKING GROUP:**

The Cariboo-Chilcotin Grasslands Strategy Working Group is preparing a regional strategy to serve as a strategic framework for grasslands conservation in the Cariboo-Chilcotin. Although independent of the Strategy itself, the Grasslands Conservation Council of BC (GCC) and its Programs will continue to support and provide information to the Working Group. The GCC recognizes that information and products disseminated through its Education & Outreach Program will better equip managers and decision makers in the development of a successful Strategy.

8. **SIGNIFICANCE FOR LIGNUM AS PUBLIC INPUT:**

The BC Grasslands Conservation Risk Assessment serves as essential public input into the process of developing Sustainable Forest Management Plans (SFMPs). Sustainable Forest Management Plans are intended to balance all land management objectives within the limits provided by the Cariboo-Chilcotin Land Use Plan. The information this project provides on grassland biodiversity and the risks to this biodiversity will be valuable to Lignum and other forest licencees and invaluable to the segment of ranching interests strongly reliant on grasslands for grazing, government agencies, recreational groups, wildlife and conservation non-governmental organizations who are deeply concerned with the loss of grassland habitat.
Lignum in concert with the Lignum Range Working Group will use the information provided by this project to develop restoration projects for those grassland areas that have been lost to forest encroachment and in-growth, and to ensure that activities undertaken in the adjacent forest mosaic do not negatively affect grassland values, and where possible improve grassland values. Although the forest resource is the source of Lignum’s economic wealth and the focus of its management expertise, Lignum realizes that there is no dividing line between ecosystems and that all land management should be coordinated to ensure management of one ecosystem is not at the detriment of another and that where possible both ecosystems benefit from action.

9. COMMUNICATION & EXTENSION PLAN:


Information-sharing agreements have been developed with organizations that would like to use information produced by this project (prior to the information being formally released). The need and demand for this information is becoming very apparent. Agreements currently in place include: Lower Similkameen Indian Band, Vernon Naturalists, Allan Brooks Centre and Columbia Basin Fish and Wildlife Compensation Program (Biodiversity Atlas for the Columbia Basin). Pending and future agreements may include Nature Conservancy of Canada, Ducks Unlimited Canada (Intermountain Joint Venture) and Environment Canada. A comprehensive extension plan is currently being developed.

10. BUDGET DETAILS:

Available upon request.

11. RECOMMENDATION AND SUGGESTIONS:

Most of the applicable information is covered in the above points. See ‘Benefits’ and ‘Significance for Lignum’.

The GCC recommends that organizations and groups continue funding this very important Project. The Project team and the Technical Review Committee agree that the GCC is using an effective and efficient approach to completing the BC Grasslands Conservation Risk Assessment.
12. **FUNDING PARTNER ACKNOWLEDGEMENT:**

The BC Grasslands Conservation Risk Assessment has been made possible through the generous contributions and support of numerous organizations. The Grasslands Conservation Council of British Columbia recognizes the following organizations as instrumental to the success of this Project. Thank you.

- Ministry of Forests
- Ministry of Sustainable Resource Management
- Ministry of Water, Land, and Air Protection
- Habitat Conservation Trust Fund
- Vancouver Foundation
- Wildlife Habitat Canada
- The Real Estate Foundation
- Columbia Basin Trust
- The Nature Trust of BC
- Lignum
APPENDIX 1: CARIBOO FOREST REGION STATISTICS

Year 3 statistics for the Cariboo Region were generated from 1:20 000 scale grasslands mapping combined with the land status and range tenure overlays in the 100 Mile House, Williams Lake, Chilcotin and Quesnel Forest Districts. These figures were produced in September of 2002 and are considered draft until Project completion.

1. Statistics by Forest Region

<table>
<thead>
<tr>
<th>Cariboo Forest Region: ALR &amp; Grazing Tenure</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total Region grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1. Private Grassland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in Agricultural Land Reserve (ALR)</td>
<td>75608</td>
<td>86.2%</td>
<td>29.3%</td>
</tr>
<tr>
<td>outside ALR</td>
<td>10403</td>
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</tr>
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<tr>
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<td>2.4%</td>
</tr>
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<td></td>
<td></td>
<td>category 3 total - 3.7%</td>
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</tr>
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<td>2662</td>
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<td>1.2%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>TOTAL GRASSLAND</td>
</tr>
<tr>
<td></td>
<td>222202</td>
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<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cariboo Forest Region: Protected &amp; Acquired Lands</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total Region grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1. Private Grassland</td>
<td>75608</td>
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</tr>
<tr>
<td>as NGO acquired land</td>
<td>21</td>
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<tr>
<td>outside NGO acquired land</td>
<td>75587</td>
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### 2. Statistics by Forest District

<table>
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<tr>
<th>100 Mile House Forest District: ALR &amp; Grazing Tenure</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
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<td>Category 1. Private Grassland</td>
<td>19496</td>
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<td>34.2%</td>
</tr>
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<td>in Agricultural Land Reserve (ALR)</td>
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<td>outside ALR</td>
<td>2480</td>
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<td>category 1 total - 39.2%</td>
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<tr>
<td>Category 2. Crown Grassland</td>
<td>28259</td>
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<td></td>
</tr>
<tr>
<td>Category 2a. Crown Grassland under Grazing Tenure</td>
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<td>56.7%</td>
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<td>in ALR</td>
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<td>10505</td>
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<td>21.1%</td>
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<tr>
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<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>outside ALR</td>
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<td>0.0%</td>
</tr>
<tr>
<td></td>
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<td>category 2 total - 56.7%</td>
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<td>Category 3. Indian Reserve Grassland</td>
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<tr>
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<td>391</td>
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<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>100 Mile House District: Protected &amp; Acquired Lands</td>
<td>area (ha.)</td>
<td>% of category total</td>
<td>% of total District grassland</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>Category 1. Private Grassland</strong></td>
<td>19,496</td>
<td>100.0%</td>
<td>39.2%</td>
</tr>
<tr>
<td>as NGO acquired land</td>
<td>0</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>outside NGO acquired land</td>
<td>19,496</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td><strong>category 1 total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 2. Crown Grassland</strong></td>
<td>28,259</td>
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<td>6.2%</td>
</tr>
<tr>
<td>in protected area</td>
<td>3,062</td>
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<td>6.2%</td>
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<td>outside protected area</td>
<td>25,197</td>
<td>89.2%</td>
<td>50.5%</td>
</tr>
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<td><strong>category 2 total</strong></td>
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<td><strong>Category 3. Indian Reserve Grassland</strong></td>
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<tr>
<td><strong>category 3 total</strong></td>
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<tr>
<td><strong>TOTAL GRASSLAND</strong></td>
<td>49,787</td>
<td>100%</td>
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</table>

<table>
<thead>
<tr>
<th>Williams Lake Forest District: ALR &amp; Grazing Tenure</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1. Private Grassland</strong></td>
<td>46,939</td>
<td>85.8%</td>
<td>32.3%</td>
</tr>
<tr>
<td>in Agricultural Land Reserve (ALR)</td>
<td>40,276</td>
<td>85.8%</td>
<td>32.3%</td>
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<tr>
<td>outside ALR</td>
<td>6,663</td>
<td>14.2%</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>category 1 total</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 2. Crown Grassland</strong></td>
<td>73,147</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 2a. Crown Grassland under Grazing Tenure</strong></td>
<td>73,138</td>
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<td></td>
</tr>
<tr>
<td>in ALR</td>
<td>51,477</td>
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<td>41.4%</td>
</tr>
<tr>
<td>outside ALR</td>
<td>21,661</td>
<td>29.6%</td>
<td>17.4%</td>
</tr>
<tr>
<td><strong>Category 2 total</strong></td>
<td></td>
<td></td>
<td>58.8%</td>
</tr>
<tr>
<td><strong>Category 2b. Crown Grassland not under Grazing Tenure</strong></td>
<td>9</td>
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</tr>
<tr>
<td>in ALR</td>
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<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>outside ALR</td>
<td>9</td>
<td>100.0%</td>
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</tbody>
</table>
### Williams Lake District: Protected & Acquired Lands

<table>
<thead>
<tr>
<th>Category 1. Private Grassland</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>as NGO acquired land</td>
<td>0</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>outside NGO acquired land</td>
<td>46939</td>
<td>100.0%</td>
<td>37.7%</td>
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<tr>
<td><strong>category 1 total</strong></td>
<td><strong>46939</strong></td>
<td></td>
<td><strong>37.7%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category 2. Crown Grassland</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>in protected area</td>
<td>22370</td>
<td>30.6%</td>
<td>18.0%</td>
</tr>
<tr>
<td>outside protected area</td>
<td>50777</td>
<td>69.4%</td>
<td>40.8%</td>
</tr>
<tr>
<td><strong>category 2 total</strong></td>
<td><strong>73147</strong></td>
<td></td>
<td><strong>58.8%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category 3. Indian Reserve Grassland</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4376</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>category 3 total</strong></td>
<td><strong>4376</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL GRASSLAND** | **124462** | **100%** |

### Chilcotin Forest District: ALR & Grazing Tenure

<table>
<thead>
<tr>
<th>Category 1. Private Grassland</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>in Agricultural Land Reserve (ALR)</td>
<td>7813</td>
<td>86.9%</td>
<td>16.7%</td>
</tr>
<tr>
<td>outside ALR</td>
<td>1180</td>
<td>13.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td><strong>category 1 total</strong></td>
<td><strong>8993</strong></td>
<td></td>
<td><strong>19.2%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category 2. Crown Grassland</th>
<th>area (ha.)</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2a. Crown Grassland under Grazing Tenure</td>
<td>31105</td>
<td>86.4%</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL GRASSLAND** | **124462** | **100%** |
## Chilcotin Forest District: Protected & Acquired Lands

<table>
<thead>
<tr>
<th>Category</th>
<th>Private Grassland</th>
<th>ALR</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1. Private Grassland</td>
<td>8993</td>
<td>55.6%</td>
<td>19.2%</td>
<td></td>
</tr>
<tr>
<td>as NGO acquired land</td>
<td>21</td>
<td>0.2%</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>outside NGO acquired land</td>
<td>8972</td>
<td>99.8%</td>
<td>19.2%</td>
<td></td>
</tr>
<tr>
<td>category 1 total</td>
<td></td>
<td></td>
<td>19.2%</td>
<td></td>
</tr>
</tbody>
</table>

| Category 2. Crown Grassland | 36021 | 4.6% | 77.1% |
| in protected area | 2143 | 5.9% | 4.6% |
| outside protected area | 33878 | 94.1% | 72.5% |
| category 2 total | | | 77.1% |

| Category 3. Indian Reserve Grassland | 1691 | | 3.7% |
| | | | |
| TOTAL GRASSLAND | 46705 | | 100% |

## Quesnel Forest District: ALR & Grazing Tenure

<table>
<thead>
<tr>
<th>Category</th>
<th>Private Grassland</th>
<th>ALR</th>
<th>% of category total</th>
<th>% of total District grassland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1. Private Grassland</td>
<td>180</td>
<td>55.6%</td>
<td>8.0%</td>
<td></td>
</tr>
<tr>
<td>in Agricultural Land Reserve (ALR)</td>
<td>100</td>
<td>44.4%</td>
<td>6.4%</td>
<td></td>
</tr>
<tr>
<td>outside ALR</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>category 1 total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grasslands Conservation Council of BC
<table>
<thead>
<tr>
<th>Category 2. Crown Grassland</th>
<th>1011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 2a. Crown Grassland under Grazing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tenure</strong></td>
<td>area (ha.)</td>
</tr>
<tr>
<td>in ALR</td>
<td>585</td>
</tr>
<tr>
<td>outside ALR</td>
<td>547</td>
</tr>
<tr>
<td><strong>Category 2b. Crown Grassland not under Grazing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tenure</strong></td>
<td>area (ha.)</td>
</tr>
<tr>
<td>in ALR</td>
<td>426</td>
</tr>
<tr>
<td>outside ALR</td>
<td>400</td>
</tr>
<tr>
<td><strong>Category 3. Indian Reserve Grassland</strong></td>
<td>57</td>
</tr>
<tr>
<td><strong>in ALR</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>outside ALR</strong></td>
<td>52</td>
</tr>
<tr>
<td><strong>TOTAL GRASSLAND</strong></td>
<td>1248</td>
</tr>
</tbody>
</table>