

Luscar & Gregg River Mines Land Management Plan

Regional Integrated Decision
March 2013

<u>Luscar & Gregg River Mines Land Management Plan</u> <u>Regional Integrated Decision</u>

Management of reclaimed land both before and after it reverts back to the Crown.

A Project led by Alberta Environment and Sustainable Resource Development
In Collaboration With:
Teck Resources Ltd.
Coal Valley Resources Inc.
Yellowhead County

Recommended by: Luscar and Gregg River Mines Land Management Plan Working Group

Approved by: Alberta Environment and Sustainable Resource Development

August 2012 Foothills Area

TABLE OF CONTENTS

1.0 INTRODUCTION	3			
1.1 Purpose of Land Management Plan	4			
1.2 Study Area	4			
2.0 LAND MANAGEMENT PLANNING PROCESS	4			
2.1 Planning context				
2.2 Project Process				
2.3 Project Initiation	6			
2.3.1 Data and Information Gathering	6			
2.3.2 Community of Interest Focus Group Formation	6			
2.3.3 Field Orientation Program	6			
2.3.4 Individual Focus Group Sessions	7			
2.3.5 Scenario Development	7			
2.3.6 Focus Group Meetings	7			
2.3.7 Public Open House	8			
3.0 REGIONAL INTEGRATED DECISION	8			
3.1 Vision	8			
3.2 Goals, Objectives and Strategies	8			
3.3 Resource Summary	13			
4.0 IMPLEMENTATION OF LAND MANAGEMENT PLAN	13			
4.1 Phase I – Implementation	13			
4.2 Phase II – Implementation	15			
5.0 MONITORING AND EVALUATION	15			
APPENDICES	16			
Appendix A – Map of the plan area	17			
Appendix B – Coal Branch Sub-Regional IRP designation	18			
Appendix C – Compatibility Matrix	19			
Appendix D – Proposed zonation of the plan area within WMU 438 boundaries, and				
Highway 40 road corridor sanctuary	21			
Appendix E – Proposed PLUZ boundary amendment	22			

1.0 INTRODUCTION

The Land-use Framework identifies key provincial outcomes including a healthy economy and environment and people friendly communities with ample recreational and cultural opportunities. The development of regional plans will provide strategic, comprehensive and integrated direction for social, economic and environmental outcomes. More refined land management planning and decision-making are also required at sub-regional and local scales. Due to competing land uses, such as oil and gas, mining, forestry and recreation, there is a continued need to identify desired outcomes for an area to guide future management and land use activities.

Alberta Environment and Sustainable Resource Development (ESRD), in collaboration with Teck Resources Ltd. and Coal Valley Resources Inc., used an integrated land management approach and developed a land management plan (LMP) that is characterized as a Regional Integrated Decision (RID) for public land in the Luscar and Gregg River mines (L&GRM) area.

Coal mining on public land in Alberta is guided by Alberta's *Environmental Protection and Enhancement Act* (AEPEA) and regulation. AEPEA requires mining companies to reclaim the disturbed lands. To date, the main focus of the company reclamation plans for the plan area has been wildlife habitat and watershed protection. The reclamation completed to date has created a land form and vegetation pattern resulting in an increased wildlife population, particularly bighorn sheep, mule deer and elk.

Hunting within the plan area (Luscar and Gregg River Mine areas) is currently prohibited and access is restricted. Hunting is a popular activity immediately adjacent to the border of the plan area. Non-trophy hunting has been used on a limited basis historically within a restricted portion of the plan area. In addition, relocation, primarily of Rocky Mountain bighorn sheep, has also been used to manage populations and supports other populations throughout North America. Between 1988 and 2001, approximately 272 bighorn sheep were captured and relocated within Alberta and to the USA.

The companies currently manage and operate the coal mines under *Public Lands Act* Mineral Surface Lease (MSL) dispositions. Following completion of the coal mining, the disturbed lands are reclaimed, certified, the MSL is cancelled and the land reverts back to the Crown as vacant public land. The management of public lands is the responsibility of ESRD. The LMP will guide the future management of these public lands.

This document represents the submission by the Luscar and Gregg River Mines Land Management Plan (LMP) Working Group. It has been reviewed by Alberta Environment and Sustainable Resource Development (ESRD), resulting in a few amendments made to provide clarification regarding feasible implementation mechanisms. The plan is approved by ESRD.

1.1 Purpose of Land Management Plan

The LMP provides land and resource management objectives for the plan area to guide ongoing and future reclamation activities. This provides clarity regarding how the area may be accessed in future and what land uses may be considered, to not compromise the reclamation of the Luscar and Gregg River MSL areas. Throughout the planning process, the working group considered elements such as legislation, regulatory requirements, existing land-use commitments, access management, recreational opportunities, conservation values and landscape capabilities of rehabilitated lands.

The LMP will inform the future development of the Upper Athabasca Regional Plan. The LMP will be a living document that is adaptive and will align with the Regional Plan when completed.

Implementation of the LMP comprises part of this document.

1.2 Study Area

The Luscar and Gregg River mines are located in Alberta's historic Coal Branch on the Eastern Slopes of the Rocky Mountains, approximately 43 kilometres south of Hinton along Highway 40. Whitehorse Wildland Provincial Park lies south of the Luscar and Gregg River Mine sites, and Jasper National Park (JNP) lies to the west of both mines, separated by a strip of Crown land. At its closest point, JNP is less than four kilometres away from the reclaimed lands.

Sub-surface coal mining in the area began in 1911. Modern open pit coal mining in the Luscar and Gregg River Mines area started in 1969 to supply coal for overseas markets. The planning area encompasses a significant contiguous area of mine lands of over 7,100 hectares within which 3,300 hectares was disturbed. Currently, the tenure of these lands assures wildlife protection through limited and controlled public access due to Mineral Surface Lease (MSL) tenure and post mining reclamation. To date, reclamation of about 100 per cent of the Gregg River Mine and about 50 per cent of the Luscar Mine's disturbed area has been completed (earthwork and initial revegetation completed, forest establishment in progress) and reclamation is on-going on the remaining disturbed areas.

Bighorn sheep, mule and while-tailed deer, moose and elk are commonly found on the reclaimed lands and adjacent landscape. Porcupine, marmot, pica, squirrel, mink, marten, weasel and vole and small mammals are frequently observed. There has been a noticeable increase in the carnivore population that prey on the herbivores found in the reclaimed areas. Black and grizzly bears, coyotes and wolves have become increasingly common due to the high density of prey. On the plan area, there are many wildlife-oriented recreational opportunities including wildlife viewing and photography. Currently the MSLs prohibit hunting within the plan area and restrict public access. Hunting is a popular activity immediately adjacent to the border of the plan area.

2.0 LAND MANAGEMENT PLANNING PROCESS

2.1 Planning Context

Land and resource management direction for the planning area is provided by a variety of documents. Initial resource management direction was provided in the 1976 Coal Development Policy, which zoned the mine lands as Category 4, permitting surface or underground mining subject to environmental protection and reclamation of the disturbed lands. This policy also confirms that future coal mining in the mine sites, if economical, could be continued.

The 1984 Eastern Slopes Policy was further refined by the 1990 Coal Branch Sub-Regional Integrated Resource Plan (IRP). The IRP provides broad management intent for the area, with the plan area located within the Mountain Park-Folding Mountain Resource Management Area. The management zones covering or adjacent to the plan area include (Appendix B):

Zone 1 - prime protection: This zone runs along the western boundary, buffering the mine sites from Jasper National Park. The intent of the zone is to protect environmentally sensitive resources.

Zone 2 - critical wildlife: This zone is found along the North and South Drinnan creek, in the Gregg River mine site. The intent for this zone is to protect fish and wildlife populations.

Zone 4 - general recreation: This zone focuses on retaining a variety of natural environments and allows for a range of recreational opportunities to occur.

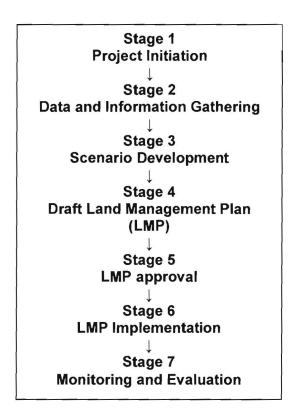
Zone 5 – multiple use: Covering the majority of the mine sites, this zone allows a full range of resource uses, while meeting the long-term objective for watershed protection and environmental protection.

The LMP will refine the direction provided in the IRP for the planning area, including providing greater clarity regarding land and resource management objectives for the area. The 1999 Coal Branch Public Land Use Zone (PLUZ) covers the planning area and provides a regulatory mechanism for implementation of access management, particularly recreation access. The LMP identifies opportunities to modify the PLUZ to ensure the necessary tools are in place to effectively manage the area.

The plan area is located entirely within the Yellowhead County and is, therefore, subject to municipal development permit approval for any proposed developments.

2.2 Project Process

The project involved seven major areas of work and development summarized in the figure below. Public and stakeholder participation occurred concurrently with various stages of the project to ensure that the public, directly affected stakeholders and identified communities of interest (e.g., communities, industry, conservation, recreation users, and traditional land users) were provided with meaningful opportunities to influence the design and development of the land management plan.



Aboriginal communities were engaged in accordance with the Government of Alberta Aboriginal Consultation Guidelines. Four aboriginal groups were identified as potentially having an interest in the plan area: Alexis Nakota Sioux Nation; Ermineskin Tribe; Foothills Ojibway Society; Nakcowinewak Nation of Canada. An information package was sent to the four groups to identify their interest in the project and to plan meetings

for further discussions if required. The package included information on the project background and planning process, along with maps.

Foothills Ojibway Society responded with an interest in the planning process. In response, a meeting was held on August 27, 2009 to provide an update on the project and to discuss any concerns in the plan area. No responses were received from the other three groups.

Throughout the process, ESRD engaged with other organizations, including: Foothills Research Institute; Tourism, Parks, and Recreation staff; Jasper National Park representatives; other coal mining companies; and the local MLA.

2.3 Project Initiation

In 2003, several stakeholders identified the need to initiate a planning process to provide direction for proper management of the reclaimed lands in Luscar and Gregg River Mines area. Areas of interest included wildlife, hunting and recreation management.

In 2006, a working group was formed consisting of land managers and the coal companies, including: ESRD; Yellowhead County; Teck Resources Ltd.; and Coal Valley Resources Inc. Adjacent land managers, regulatory agencies and major public land stakeholders participated in the working group in an advisory capacity, including: Jasper National Park; Energy Resources Conservation Board; Alberta Energy; Tourism, Parks and Recreation; and West Fraser. The MLA for West Yellowhead Constituency participated as an observer.

The Working Group identified key land-use challenges on the mine sites, including: wildlife management; motorized and non-motorized recreational use; and restoration and conservation of watershed and ecological systems.

2.3.1 Data and Information Gathering

The Working Group organized small individual stakeholder meetings and Focus Group meetings to gather feedback and supporting data/information from key stakeholders to inform the development of the draft scenario and the LMP.

The Working Group also gathered data and information from provincial government departments, mining companies and research groups to develop a GIS map project for analysis and to develop map products for meetings and public and stakeholder information.

2.3.2 Communities of Interest Focus Group Formation

A Focus Group was formed with representation from various stakeholders and communities of interest, including Whitehorse Wildland Park Steward; Cadomin Environmental Protection Association; Athabasca Bioregional Society; Alpine Club of Canada (Hinton Section); Cadomin resident; Federation of Alberta Naturalists; Town of Hinton; equestrian; Hinton OHV Association; Edson OHV Association; Edson Snowmobile Club; Alberta OHV Association; Alberta Professional Outfitters Association; eco-tourism operator; outfitter and commercial operator; Alberta Trappers Association; Alberta Fish and Game Association; Foundation for North American Wild Sheep; Hinton Fish and Game Association; Edson Fish and Game Association; Hinton resident; and Federation of Northern Alberta Wild Sheep Hunters.

2.3.3 Field Orientation Program (October 2008)

A field orientation program was held on October 17, 2008, to provide the Focus Group members with first hand knowledge of the plan area and seek input on issues, constraints and opportunities.

Nineteen attendees participated, representing various stakeholders, communities of interest, government and mining companies.

2.3.4 Individual Focus Group Sessions (December 2008)

The Working Group organized four individual Focus Group sessions to allow a more focused discussion on the future of the Luscar and Gregg River mine sites. These sessions occurred on December 1, 2, 3 and 4, 2008, and addressed the following themes:

- 1. Conservation Group/ENGO/Steward Group/Non-motorized recreation
- 2. Motorized recreation (OHV group)
- 3. Commercial Operator/Outfitters/Tourism
- 4. Hunting and wildlife management

2.3.5 Scenario Development

The Working Group initially identified land use issues, opportunities and constraints affecting the plan area. Small technical sub-groups from within the Working Group were formed to discuss specific issues and problems.

A draft vision was formulated by joint efforts of the Working Group and Focus Group. The vision was subsequently refined and provided the basis for developing goals, objectives, and strategies.

The Working Group initially identified four broad land management scenarios to initiate and frame the discussion:

- No change in action (base case)
- Restoration and conservation of watershed and ecological system
- Balance between human use and resource conservation
- Maximize human use/influence

Each scenario varied in both context and intensity of management actions and comprised a set of desired resource or future land management conditions. This suite of scenarios identified various combinations of land uses and resource management practices that would respond in varying degrees to the issues identified during the planning process.

After review of the four scenarios by stakeholders and other specialists a draft preferred scenario was developed. The development of the preferred scenario was based on input generated to date and strategies deemed necessary for achieving the vision.

The Working Group presented the draft preferred scenario to the Focus Group for further input and refinement.

2.3.6 Focus Group Meetings

The participants of all four individual stakeholder groups were brought together to discuss and exchange ideas. The specific purposes of the focus sessions were to:

- 1. Provide a forum for discussion regarding the land management plan (end land use);
- 2. Provide information on the land management planning process;
- 3. Generate input on the draft preferred scenario; and
- 4. Identify other opportunities and constraints that could be considered for the preferred scenario and the land use decision.

Three separate Focus Group sessions were organized on March 19, April 14 and August 11, 2009. The sessions focused on the vision, goals, objectives and strategies. The group also helped identify and refine the

activities that would be managed under the plan. For details on the Focus Group sessions refer to 1st, 2nd and 3rd Focus Group Summary Reports.

2.3.7 Public Open House

A public open house session was held on January 27, 2010, to provide information and solicit input on the draft preferred scenario for the development of the LMP document. The Focus Group and the Working Group members were present as a resource for questions.

A second public open house was held on October 11, 2011 to provide the public an opportunity to become familiar with the plan and to provide input in response to the information provided in the draft plan.

Information on all major issues, such as wildlife management and hunting, recreational opportunities, enforcement, education and communication, and stewardship opportunities, was displayed together with associated maps. The information received was used to further refine the draft plan.

3.0 REGIONAL INTEGRATED DECISION

The LMP Working Group makes the following recommendations:

The planning process resulted in the following vision, goals, objectives and strategies.

3.1 Vision

The plan will conserve wildlife and protect watersheds.

3.2 Goals, Objectives and Strategies

Goal 1 – Wildlife and fishery resources and their habitats are healthy, productive and sustainable.

- 1.1 Objective: Maintain viable and healthy fish and wildlife population.
- 1.2 Objective: Manage wildlife and protect habitat.
- 1.3 Objective: Manage fish and protect watersheds.
- 1.4 Objective: Maintain biodiversity.

Strategies

- If necessary, limited entry hunts may be established to manage the wildlife populations:
 - The setting of hunting seasons, as a tool to manage wildlife populations, will follow provincial species management plans, and wildlife management objectives identified in the LMP.
 - o Innovative approaches addressing wildlife management and grizzly bear conservation (including user education and awareness) should be explored in an adaptive manner. The department will identify and apply a mix of tools to meet the LMP and provincial objectives.
 - The plan area will have a separate zonation within the existing WMU 438 (Appendix D). Sub-units within the existing WMU 438 will be created to facilitate the potential for staged hunting opportunities as mined areas revert to vacant public land status (see Areas 1, 2, 3, 4 and 5 as identified in Appendix D). Any

feasible changes to the sub-unit boundaries within WMU 438 that would benefit human and wildlife management will be considered.

- The initiation of limited area hunting by permit would not occur for at least 24 months after lands revert to vacant public land, in order to assess the influence of:
 - a) open public access, and
 - b) predators on the distribution of bighorn sheep and elk, wildlife habitat and populations.
- Maintain viable wildlife populations within the carrying capacity of their range, and with hunter allocation and harvest opportunity being of secondary importance.
 - In addition, the implementation of an antierless elk hunting season in the adjacent area (i.e., outside the plan area) will be considered.
- Orientation for hunters.
- Additional wildlife management tools may include relocation (for species-specific management) and vegetation management.
- Create a wildlife viewing corridor sanctuary along Highway 40:
 - Area 3 (as identified in Appendix D) will be the Highway 40 road corridor sanctuary. The western boundary will run about one kilometre west of Highway 40 and the eastern boundary will be the eastern plan boundary. This area, with no hunting and discharge of firearms, will be a buffer for public safety and wildlife viewing.
- Public access will be monitored and assessed.
- Stocking of end pit lakes may be considered after reclamation certifications are issued.
- Biodiversity will be preserved through management of habitat for various terrestrial and aquatic biotic communities and by maintaining riparian buffers and wetlands.
- Meeting wildlife conservation objectives on the open landscape of the LMP area requires that dogs remain on leash within the plan area.
- Some species-specific direction:
 - o Sheep
 - Encourage the migratory behaviour of bighorn sheep that use the mine, by increasing the frequency of their use of native range by allowing sheep to move back and forth between reclaimed areas and the adjoining areas. It is expected that the increased presence of carnivores will stimulate this behaviour.
 - Maintain the herd in a productive, expanding state as measured by the percentage of lambs in late winter (i.e., about 20 per cent) and percentage of two-year-old females giving birth, while recognizing that predation may be having an effect on the percentage of lambs in the population.
 - o Elk
- Maintain the herd in a productive, expanding state as measured by the calf:100 cow ratio in winter, while recognizing that predation may be having an effect on the percentage of calves in the population.

Goal 2 - Water and watersheds are healthy, productive and sustainable.

2.1 Objective: Maintain healthy aquatic ecosystem in end pit lakes and water bodies.

Strategies

- Protect vulnerable areas, such as fragile creek beds, steep slopes and sensitive soils.
- Establish and maintain appropriate watercourse crossings.
- Maintain riparian buffer and vegetation along watercourses.
- Obtain data that will assist in the planning and management of water and watersheds.
 This may include information such as status of water and trends.

Goal 3 – Provide sustainable recreational opportunities

3.1 Objective: Recreational opportunities will be compatible with the existing wildlife and watershed values.

Strategies

- The Coal Branch PLUZ will allow recreational activities such as hiking, wildlife viewing, photography, mountain biking, cross country skiing, horse riding, hunting, and angling.
- Management of these activities may include seasonal timing restrictions, monitoring of users and access management.
- The recreational trails will be primitive, as defined in the Alberta Recreation Corridor and Trails Classification.
- Trails may be semi-developed near the proposed research/interpretive centre.
- Motorized access will be restricted to designated trails.
- Isolated structures may be developed where required for safety and sanitation.
- Monitoring of use will determine strategies to maintain the recreational experience.
- Establish a sustainable off-highway vehicle trail along an old exploration trail west of South Drinnan Creek.
- Locate and manage recreational trails in a sustainable manner.
- Restrictions for managing human activities may be applied based on monitoring results and observations of people's behaviour and wildlife response.
- If required, there will be mandatory orientation and sign-in/sign-out for recreational users.
- Five existing designated access trails will remain in the area including:
 - Non-motorized:
 - Sphinx Creek Trail
 - Gregg River Headwater Trail
 - Old Tower Trail
 - Motorized off-highway vehicle:
 - A7 Trail
 - Mary Gregg Lake Trail
- Snowmobiles will not be allowed except with permits for research and permitted
 development activities. The plan area is not suitable for snowmobiling because of high
 wind on the open landscape and the presence of hazardous natural features (high walls).
 The use of snowmobiles also conflicts with wildlife over-wintering needs.
- Cross-country skiing will be permitted only on designated trails and in designated areas.
- Hiking will be allowed in the plan area. There could be some area or timing restrictions.
- Mountain biking/horseback riding will be allowed only on designated trails.
- Camping is not allowed in the plan area because this tends to create conditions for increased human/wildlife conflicts. There is a camping facility available in Whitehorse Creek Trail Head campground in Whitehorse Wildland Provincial Park just south of the plan area.

- No angling and stocking of end pit lakes will be considered until after reclamation certification.
- Wildlife/landscape viewing and photography will be allowed.
- Commercial tourism will be allowed but could have location and timing restrictions.
- Any restriction on hiking, wildlife and landscape viewing, photography, and cross-country skiing, will be deferred until specific criteria are developed.
- Any other recreational activities not considered in this document will be assessed for relevance as they are identified and aligned with the objectives of the plan.

Goal 4 – Effective education and communication, enforcement, monitoring and evaluation, and stewardship.

- 4.1 Objective Enhance education, communication and information programs.
- 4.2 Objective Enhance research and necessary related infrastructure.
- 4.3 Objective Enhance interpretive opportunities related to coal mining history and wildlife and landscape viewing.
- 4.4 Objective Enhance enforcement.
- 4.5 Objective Promote stewardship, responsible use and public safety.
- 4.6 Objective Enhance monitoring and evaluation program.

Strategies

The implementation of education and communication, enforcement, monitoring and evaluation, and stewardship strategies will be addressed in the development of a more detailed implementation plan. The following suite of tools/strategies may be considered for incorporation into the detailed plan.

- Education and communication
 - Bear awareness
 - Education and communication, research, and stewardship opportunities
 - Information at trailheads, viewpoints, kiosks
 - o Orientation at trail heads/kiosk. Orientation may be mandatory.
 - Orientation for those living, recreating or working in the area
- Enforcement options:
 - o Patrols of area
 - DNA indexing
 - o Electronic surveillance
 - o Aligning Wildlife Management Unit boundaries with natural features
 - Mandatory sign-in and sign-out mechanism for visitors
- Monitoring and Evaluation:
 - Wildlife population status and trends
 - Visitor use pattern, behaviour and performances
 - o Feedback mechanism
- Stewardship:
 - o Promoting ethics of good stewardship
 - o Stewardship mechanism rules and responsibility/liabilities

- Mechanism for partnerships with stakeholders
- Involving interested stakeholders in operational planning, implementation and monitoring

Research/Interpretive Opportunities:

Research and interpretive opportunities may exist and be fostered within the plan area. The development of a research/interpretive centre has been identified as a separate but aligned initiative apart from the development of the LMP. The intent is that this proposed facility would complement the goals and objectives of the LMP. The following proposed main areas of focus for the research/interpretive centre would align with the LMP:

- Wildlife viewing
- Coal/geological history
- · Coal mining and land reclamation
- Management practices
- Environmental, social and economic research initiatives
- Ecological study
- Eco-tourism
- Develop view points for the purpose of learning, experiencing and enjoying landscape

Goal 5 - Provide commercial and industrial opportunities compatible with the plan.

- 5.1 Objective Coal mining opportunities will continue
- 5.2 Objective Other commercial and industrial activities will align with the intent of the plan

Strategies

- Industrial and commercial activities to be aligned with the direction provided by LMP.
- Agriculture leases grazing of domestic animal/horses will not be allowed in the plan area due to the risk of disease transmission to wildlife species.
- Forestry
 - Logging will not be allowed in the plan area except in a small portion of the plan area (less than five per cent) that overlaps with West Fraser Mills Ltd. Hinton Division's FMA.
 - Any future forest management and logging activities will align with the plan.
- Oil and gas and other minerals
 - Other than coal currently there are no other sub-surface rights issued in the plan area.
 - Issuance of any sub-surface rights disposition will align with the intent and the direction provided by the plan.
- Coal mining
 - O There are coal resources in the area that have not been extracted.
 - o Coal companies will have access to the coal resources.
 - o Coal mining companies hold sub-surface rights exclusively for coal.
 - Any future coal mining activities will align with the plan.

3.3 Resource Summary

Detailed information regarding the land and resource attributes and planning process of the plan area is captured within the following documents:

- Luscar and Greag River Mines Land Management Plan Backgrounder (2008)
- Luscar & Gregg River Mines Land Management Planning Project Public and Aboriginal Consultation & Communication Strategies (2007)
- Luscar & Gregg River Mines individual stakeholder session summary(2009)
- Luscar & Gregg River Mines LMP 1st, 2nd, 3rd Stakeholder Focus Group Summary (2009)
- Luscar & Gregg River Mines LMP Summary of Public Open House (2010)
- Luscar & Gregg River Mines LMP Summary of Public Open House (2011)

4.0 IMPLEMENTATION OF LAND MANAGEMENT PLAN

ESRD will lead the development of a more detailed implementation plan to further articulate the strategies and to describe the roles and responsibilities associated with implementing the LMP. In particular, this will address education, communication, enforcement, monitoring and evaluation and stewardship strategies. The existing Working Group will provide input for developing the detailed implementation plan. The group will meet when necessary.

The LMP will be implemented using a phased approach. The strategies described in the LMP are intended to be implemented over a variable timeframe, with some being implemented in the short or longer term, and therefore vary in detail. For example, some longer-term strategies may not be implemented until 20 to 25 years in the future when lands are reclaimed, certified and returned to ESRD administration. Shorter-term strategies may be implemented prior to this and may in turn better enable some of the longer-term strategies.

Site-specific planning and stakeholder participation will be necessary as part of the LMP implementation process. Any future mine activities will reflect the intent of the LMP and provide mitigation measures where needed. Implementation will be dependent on resources available to support implementation such as funding, staff and program support.

4.1 Phase I Implementation

The following strategies may be implemented prior to the lands receiving reclamation certification, the MSL being cancelled and lands returned to ESRD administration. In addition, these strategies have been identified as not requiring additional resources or funding, which allows them to be implemented following finalization of the LMP and prior to the lands reverting back to the Crown.

1. Wildlife Management Unit (WMU)

- a. The plan area will have a separate zonation within the existing WMU 438 to reflect the uniqueness of the area (Appendix D).
- b. Any feasible changes to sub-unit boundaries within WMU 438 that would benefit human and wildlife management will be considered. The new boundaries should make enforcement less complicated.
- c. The separate zonation of the plan area within WMU 438 will be carried out by ESRD.
- d. The management and operation of the plan area will reflect active mineral surface lease requirements that close areas to hunting (also under *Wildlife Act*) until lands revert to the Crown. At that time, amendments within the plan area would be in line with the wildlife management strategies identified in the LMP.

- e. Management of hunting in the plan area will be in line with the strategies identified in the LMP.
- 2. Public Land Use Zone (PLUZ) Amendments*
 - a. Modification in the Coal Branch PLUZ boundaries to include south Drinnan Creek area.
 - South Drinnan Creek area is currently within the MSL and the plan area but outside Coal Branch PLUZ.
 - ii. Including this area within the Coal Branch PLUZ will help manage and control illegal quad use in and around South Drinnan Creek, and will effectively manage the proposed OHV trail west of the South Drinnan Creek.
 - iii. To achieve the objectives outlined in the plan, it is necessary to include the South Drinnan area in the Coal Branch PLUZ. The list of lands to be included in the Coal Branch PLUZ and the map of the proposed PLUZ boundary is presented in Appendix E.
 - iv. Recreational uses in important fish and wildlife habitat and environmentally sensitive areas can be limited through PLUZ designation, which will help better manage motorized and non-motorized recreation.
 - v. Implementation will occur through a variety of mechanisms such as signage, physical closure, enforcement and monitoring. Department enforcement staff will ensure recreation users comply with the requirement of the PLUZ.
 - b. Coal Branch PLUZ will be designated as a no camping zone except where authorized by signs and notices posted in the zone. A number of designated random camping sites (nodes) will be created inside the Coal Branch PLUZ but outside the plan area.
 - *Proposed amendments to the PLUZ require changes to the Public Lands Administration Regulation (PLAR) and will be coordinated with any review/amendment of PLAR accordingly. In the interim, a Consultative Notation (CNT) will be placed on the plan area to assist to achieve some of these strategies.
- 3. Highway 40 Road Corridor Sanctuary
 - a. Area 3 (as identified in Appendix D) will be the Highway 40 road corridor sanctuary. The western boundary will run about one kilometre west of the Highway 40 along some natural features, as far as possible, and the eastern boundary will be the plan area/WMU boundary.
 - b. Natural features will be used for demarcation where possible and signs will be posted (Highway 40 road side sanctuary).
 - c. Hunting will be prohibited in the area both while under active mineral surface lease disposition and after lands revert back to the Crown.
- 4. Access Management The reclaimed lands are not expected to revert back to the Crown all at once, but in parts or parcels. While the MSL is in place, public access is restricted to designated trails which have been enabled by the MSL holder. Public access across the site is provided only on designated motorized and non-motorized trails.
 - a. Maintain five existing designated access trails:
 - i. Non-motorized: Sphinx Creek Trail, Gregg River Headwater Trail and Old Tower Trail will remain as non-motorized trails to maintain the historical trails system and to provide a more primitive, backcountry recreational experience. Non-motorized use is more compatible in these areas to minimize public safety concerns as well as wildlife and landscape impacts. The topography could lead to trail users leaving the trail and accessing other areas that could be unsafe if approached by high speed

- motorized vehicles. Speed and noise of motorized vehicles may disrupt wildlife behaviour and negatively impact the trail condition. Precluding motorized use of these trails, minimizes the enforcement needs on adjacent lands and connecting trails. This will allow public to traverse the plan area for recreational opportunities.
- ii. Motorized (Off Highway Vehicle): A7 Trail will remain as a designated OHV access trail. This trail provides access from Highway 40 to the west of the plan area for hunting and other recreational opportunities. Mary Gregg Lake OHV Trail, upgraded in 2008, will provide access to Mary Gregg Lake, a popular site for angling. A sustainable off-highway vehicle trail along an old exploration trail west of South Drinnan Creek will be established once the land tenure reverts to the Crown.
- 5. Voluntary orientation could occur in Phase I for all users but mandatory orientation will be considered only in Phase II, after detailed plans with specific criteria are developed.

4.2 Phase II Implementation

The following strategies may be implemented *after* the lands receive reclamation certification, the MSL is cancelled and lands are returned to SRD administration:

Public access is permitted and guided by the LMP, Coal Branch PLUZ designation, WMU guidelines and Highway 40 road corridor sanctuary.

- a. Future motorized and non-motorized trail development will be compatible with wildlife conservation and watershed protection goals and objectives.
- b. Establishment of a South Drinnan OHV trail along an old exploration trail west of South Drinnan creek or possibly a new alignment. This will provide OHV access through the plan area. This will also help protect fish habitat and water quality in South Drinnan Creek by keeping illegal OHV use out of the South Drinnan Creek.
- c. Future non-motorized trails will consider:
 - i. Trails with destination (viewpoint) in mind
 - ii. Trails with interpretive potential
- d. Education and communication, enforcement, monitoring and evaluation, and stewardship are all important components of this plan but will be dealt with in a separate land use decision once a detailed plan is developed.

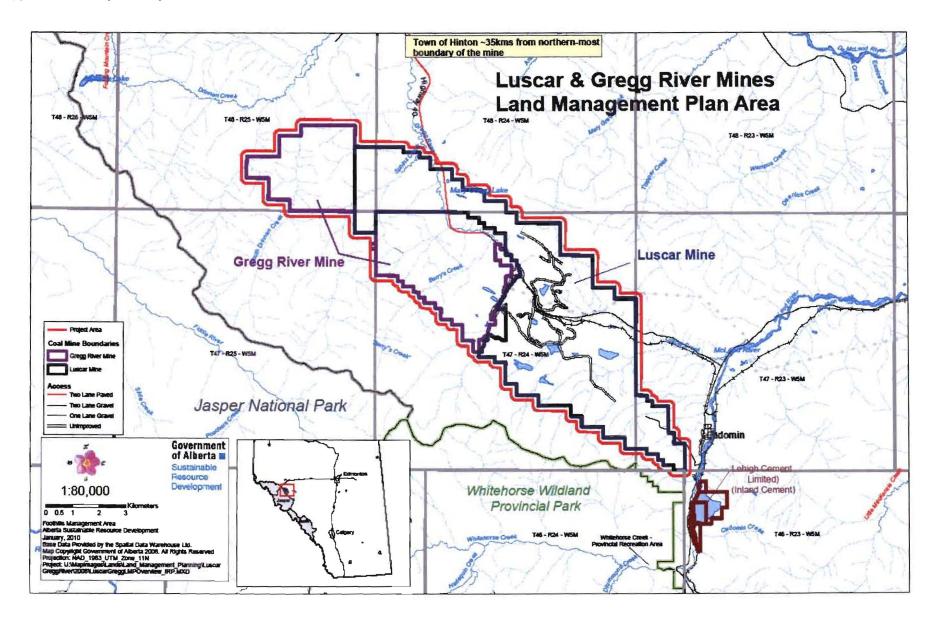
5. MONITORING AND EVALUATION

- ESRD will lead a review of the LMP in five years or sooner if information and the planning environment warrants. The review will address any required amendments based on new information.
 Following the implementation of this RID, ESRD will monitor the progress of the project implementation.
- The LMP does not provide specific details on monitoring/assessments and resource requirements (such as special hunter training, mandatory orientation for both recreational users and hunters, requirements for the public to sign in and sign out); these elements are recognized as Phase II implementation strategies, and will be considered once detailed plans and criteria are developed
- The LMP will both inform the development of the Upper Athabasca Regional Plan and will be reviewed following the completion of the regional plan to ensure the LMP aligns with the regional plan.

APPENDICES

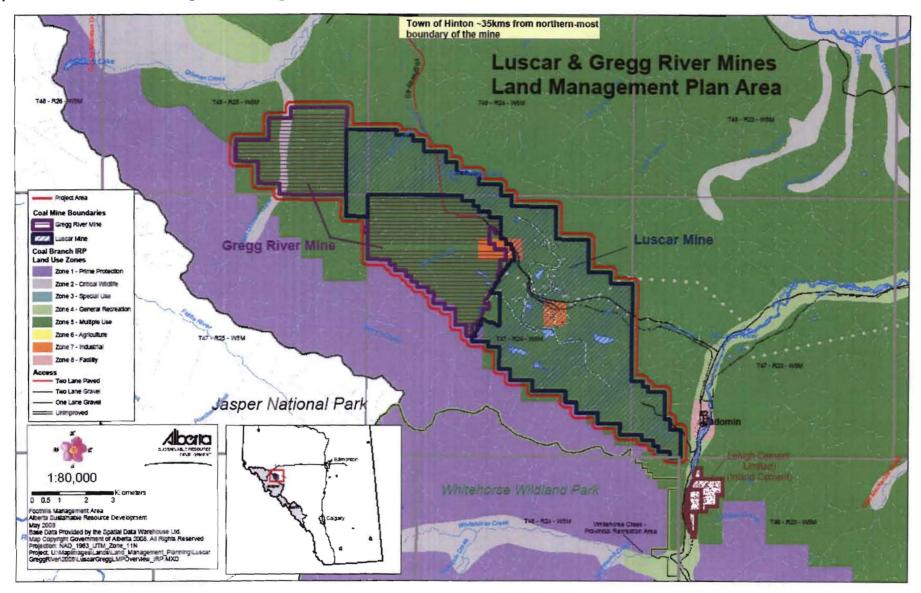
- A Map of the plan area
- B Coal Branch Sub-Regional IRP designation
- C Compatibility Matrix
- D Proposed zonation of the plan area within WMU 438 and Highway 40 road corridor sanctuary
- E Proposed change for Coal Branch PLUZ boundary

Appendix A - Map of the plan area



17

Appendix B - Coal Branch Sub-Regional IRP designation



Appendix C - Compatibility Matrix

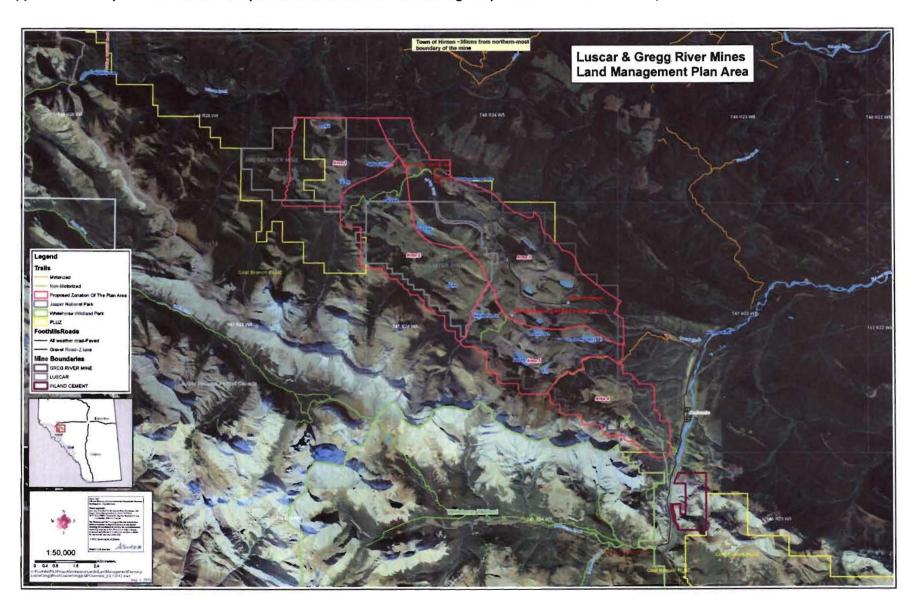
The following table provides list of managed and prohibited activities.

Compatibility of recreational, commercial and industrial activities with the intent of the plan:

Activities	Compatibility	Rationale
Hiking	Managed	Permitted. Certain hazardous areas may be restricted.
Wildlife and landscape viewing	Managed	Permitted with restrictions as required.
Photography	Managed	Permitted with seasonal restrictions as required.
Highway vehicle	Prohibited	Damages landscapes and conflicts with other values.
Off-highway vehicle	Managed	Permitted only in designated trails and areas due to public safety concerns and to reduce conflicts with wildlife winter range.
Cross-country skiing	Managed	Permitted only on designated trails.
Snowmobiling	Managed	May be considered for research and safety initiatives, subject to permit. Snowmobiling is restricted for reasons of public safety and to reduce conflicts with wildlife wintering range.
Overnight camping	Prohibited	Camping opportunities are available outside the LMP area in Whitehorse Creek trailhead campground in Whitehorse Wildland Provincial Park, Watson Creek just south of the plan area and the McLeod River east of the area.
Mountain biking	Managed	Mountain biking will be allowed only on designated trails due to the potential damage to reclaimed landscape, conflicts with other users and public safety.
Equestrian	Managed	Horseback riding will be allowed only on designated trails due to the potential damage to reclaimed landscape, conflicts with other users and public safety.
Commercial tourism	Managed	Need further assessment to determine activities and may have location and timing restrictions.
Hunting	Managed	May be used to maintain healthy wildlife populations within the carrying capacity.
Trapping	Managed	May be considered with further assessment.
Angling in short term	Managed	Catch and release is permitted.
Angling in long-term	Managed	Water bodies must have sustainable fish populations and meet reclamation certification and other

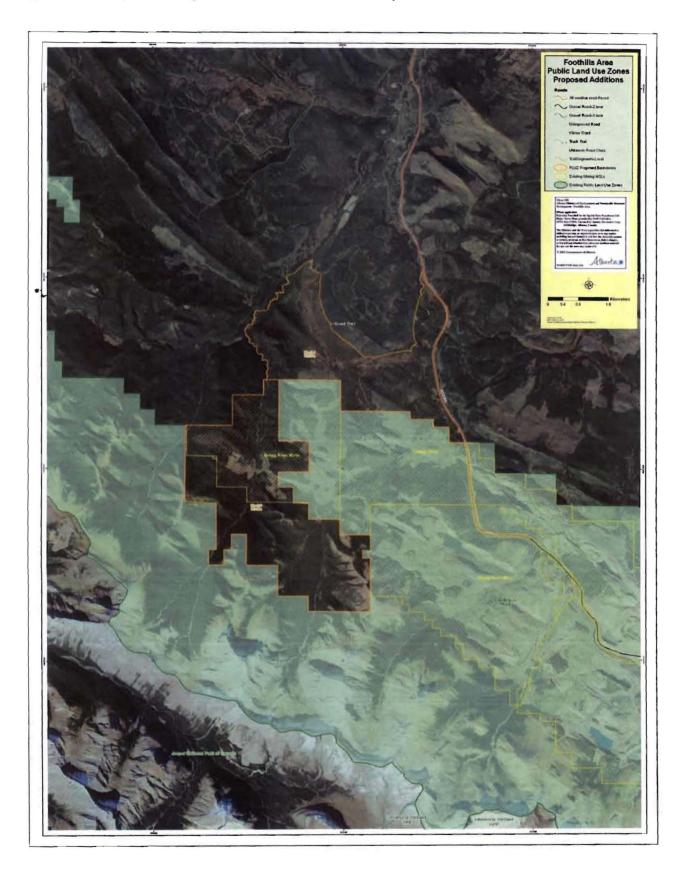
		applicable requirements.
Domestic grazing	Prohibited	Agriculture leases will not be allowed in the plan area due to the risk of disease to wildlife, and possible damage to reclaimed areas.
Dogs	Managed	Requires that dogs remain on leash. May stress wildlife, especially sheep on the open landscape of the LMP area
Research and interpretive opportunities	Managed	Research and interpretive opportunities may exist and be fostered within the plan area.

Appendix D – Proposed zonation of the plan area within WMU 438 and Highway 40 road corridor sanctuary



21

Appendix E – Proposed change for Coal Branch PLUZ boundary



22

Endorsement of Luscar & Gregg River Mines Land Management Pla	n -Regional Integrated Decision
The Luscar & Gregg River Mines Land Management Plan is approved management in the plan area.	d to guide public land and resource
Original Signed by Jeff Reynolds, Executive Director Land Management Branch Ministry of environment and Sustainable Resource Development	Sept 11, 2012 Date

Sept 12, 2012

Date

Original Signed by
Ron Bjorge, Executive Director
Wildlife Management Branch
Ministry of Environment and Sustainable Resource Development