

B.3.0 SUBSURFACE RESOURCES

B.3.1 Minerals and Coal

The SRMMP area has known resources and/or potential for coal and various minerals (see Appendix 12.0 and Maps App.3.1 and App.3.2). Aggregate resources are produced from low-elevation sites in some of the major valleys, and rock is quarried at several sites.

Five large coal mines lie just outside and to the east of the SRMMP area within the resource evaluation area. Some of the coal-bearing lands in the plan area (Map App.3.1) are within the Enhanced Resource Development Zone for coal (ERDZ-C) as designated in the East Kootenay Land Use Plan (Map B.3.1.2).

Issues:

- There is a need to confirm certainty of access for mineral and coal exploration and development in the SRMMP area, in light of:
 - previous and ongoing conservation initiatives operating outside the provincial land-use planning process; and
 - provincial land-use designations and objectives related to managing other resource values, but which potentially reduce opportunity for, and increase the cost of, mineral and coal exploration and development, and add to investor uncertainty
- Knowledge of the plan area's mineral and coal worth is incomplete, due to hidden nature of resources and relative lack of exploration to date for some commodities
- There is a current lack of clarity concerning operational implementation of the ERDZ-C designation

Intent:

- Encourage investment in exploration and development of mineral and coal resources
- Implement certainty of access for mineral and coal exploration and development; specifically, activities related to exploration and development of minerals and coal are permitted throughout all non-protected lands (see Appendix 22.2)
- Ensure activities related to mineral and coal exploration and development are conducted in a manner that respects other resource values; specifically:
 - SRMMP maps and associated management direction will provide information needed to identify and address sensitive values on a site-specific basis; and
 - standard permitting and approval processes and reclamation requirements, including bonding, will be utilized
- Recognize the seasonal requirements of many exploration activities
- Recognize that development opportunities for minerals and coal are not limited in any way to those occurrences and resources that are known at this time
- Incorporate new information concerning mineral and coal resources into plan monitoring and the evolving resource management regime
- Manage ERDZ-C lands in the SRMMP area (see Map B.3.1.2) as enhanced resource development zones for coal. The ERDZ-C designation represents a long-term priority

commitment and long-term security of access for the coal industry. In ERDZ-C lands, ecosystem function may be temporarily compromised, but long-term environmental quality will be addressed through reclamation and mitigation, as determined by the permitting process (also see Appendix 22.1)

- Develop specific ERDZ-C operational and/or permitting guidelines as part of a future project addressing all ERDZ-C lands both within and outside the SRMMP area, in order to deliver previously-assured certainty for the coal sector (see Appendix 22.1)
- Ensure a continuing local supply of aggregate resources and other industrial minerals to meet development demands

Resource objectives:

Objective 3.1.1

All lands in the plan area displayed as “land open to mining” in Map B.3.1.1 are available for mineral exploration and development, subject to existing legislation.

Objective 3.1.2

Management intent and objectives for other resource values in the SRMMP (including, but not limited to, old-growth, connectivity, ungulate winter range, riparian, visual landscapes and recreation) will not preclude application for, or approval of, mining activities anywhere in the lands referred to in Objective 3.1.1

Best management practices

- *Mineral Exploration Code* and associated *Best Management Practices (in prep.)*

Economic benefits and opportunities:

- Certainty for mining
- New and continuing exploration for minerals and coal
- Large-scale production, processing and distribution
- Small-scale production, processing and distribution (including aggregate, decorative stone and other industrial minerals)

Measures of success:

- Reasonable, cost-effective and appropriate access for exploration and development of minerals and coal available throughout the SRMMP
- Increased mineral and coal tenures and overall exploration expenditures in the SRMMP (partly reflecting improved investor confidence)
- Other resource values and uses addressed appropriately through standard project approval processes
- Successful reclamation of mining-related activity sites
- Improved knowledge and data concerning minerals and coal (based on results of exploration projects)

- Improved public knowledge and awareness of minerals and coal resources and associated processes

Maps:

B.3.1.1 Mineral 2-zone

B.3.1.2 ERDZ-Coal

App.3.1 Coal-bearing lands

App.3.2 Mineral potential

B.3.2 Oil and Gas

The SRMMP area has known resources and/or potential for coalbed methane, natural gas and oil. Appendix 22.3 contains a quantitative assessment of petroleum resource potential in the plan area.

Issues:

- There is a need to confirm certainty of access for coalbed methane, natural gas and oil exploration and development in the SRMMP area, in light of:
 - previous and ongoing conservation initiatives operating outside the Provincial land-use planning process
 - Provincial land-use designations and objectives related to managing other resource values, but which potentially reduce opportunity for, and increase the cost of, coalbed methane, natural gas and oil exploration and development, and add to investor uncertainty
- Knowledge of the area's coalbed methane, natural gas and oil worth is incomplete, due to hidden nature of resources and relative lack of exploration to date

Intent:

- Encourage investment in exploration and development of coalbed methane, natural gas and oil
- Implement certainty of access for coalbed methane, natural gas and oil exploration and development; specifically, activities related to exploration and development of coalbed methane, natural gas and oil are permitted throughout all non-protected lands
- Ensure activities related to coalbed methane, natural gas and oil exploration and development are conducted in a manner that respects other resource values; specifically:
 - SRMMP maps and associated management direction will provide information needed to identify and address sensitive values on a site-specific basis
 - standard permitting and approval processes, and reclamation requirements, will be utilized
- Recognize the seasonal requirements of many exploration activities
- Recognize the need to establish rights-of-way for pipelines and other infrastructure to support pilot and production projects
- Recognize that development opportunities for coalbed methane, natural gas and oil are not limited in any way to those occurrences and resources which are known at this time

- Incorporate new information concerning coalbed methane, natural gas and oil into plan monitoring and the evolving resource management regime
- Opportunities for access to coalbed methane, oil and natural gas on ERDZ-C lands are not diminished by the ERDZ-C designation and intent

Best management practices

- Most current version of the Oil and Gas Commission (OGC) *Oil and Gas Handbook*, or equivalent OGC documents, or equivalent OGC website information (www.ogc.gov.bc.ca), as appropriate
- *Guidelines for Coalbed Methane Projects in British Columbia (Oil and Gas Commission, October, 2002)*
- *CBM Authorization Guide EP-CBM-G-0211: A guidance document for obtaining a permit to discharge produced water from coalbed methane (CBM) operations (MWLAP Environmental Protection, November, 2002, draft)*
- *CBM Produced Water Guideline EP-CBM-G-0207: Interim guideline for the discharge of produced water from coalbed methane operations (Stroscher and McDonald, July, 2002, draft)*

Economic benefits and opportunities:

- Certainty for coalbed methane, natural gas and oil
- New and continuing exploration for coalbed methane, natural gas and oil
- Coalbed methane, natural gas and oil production, processing and distribution

Measures of success:

- Reasonable, cost-effective and appropriate access for exploration and development of coalbed methane, natural gas and oil available throughout the SRMMP
- Increased coalbed methane, natural gas and oil tenures and overall exploration expenditures in the SRMMP (partly reflecting improved investor confidence)
- Other resource values and uses addressed appropriately through standard project approval processes
- Successful reclamation of coalbed methane, natural gas and oil activity sites
- Improved knowledge and data concerning coalbed methane, natural gas and oil (based on results of exploration projects)
- Improved public knowledge and awareness of coalbed methane, natural gas and oil and associated processes