Strathcona-Westmin Provincial Park (Figure 1) is surrounded by Strathcona Provincial Park and represents an area 2% the size of Strathcona Provincial Park. The Master Plan for Strathcona Provincial Park was approved in 1993 and defines land use and development for areas adjacent to Strathcona-Westmin Provincial Park. Accordingly, the Strathcona-Westmin Master Plan must recognize the direction and constraints that the Strathcona Provincial Park Master Plan places on land use and ensure that the actions specified in this plan have a minimal effect on Strathcona Provincial Park.

Strathcona-Westmin is a unique situation as no other provincial park contains an operating mine, and it is expected that the mine will operate for the foreseeable future. Westmin Resources Ltd. is committed to developing a cooperative working relationship with BC Parks in meeting the Park's conservation and recreation goals. As an active participant in management of the Park, the mine operator acknowledges the special responsibilities of operating in a provincial park, and is committed to carrying out its general mining activities in a manner which is appropriate in a sensitive area.

BC Parks has the overall responsibility for managing the lands within the Park, but this role cannot be accomplished in isolation. The administration of regulations affecting the mine and mining operations involves the cooperation of many agencies including the Ministry of Energy, Mines and Petroleum Resources, Environmental Protection (Ministry of Environment, Lands and Parks), Department of Fisheries and Oceans, and Environment Canada. Through their enabling legislation, each of these agencies has jurisdiction over the mine site. Communication and co-operation between agencies, BC Parks and Westmin Resources Ltd. is essential to the protection and management of the Park's resources.

The boundaries of the Park have been limited to the area of the mining leases held by Westmin Resources Ltd.. These are not natural boundaries. Mining activity could affect the natural and recreational environment of Strathcona Provincial Park by reducing air and water quality or increasing noise levels and the amount industrial traffic on public roads. Assessment and management of activities, including environmental and socio-economic factors, will consider the impacts on Strathcona Provincial Park and will detail ways to minimize these impacts.
Much of this plan is based on information and public input generated by the public process to develop the Strathcona Provincial Park Master Plan. This process was directed by the Strathcona Steering Committee, a group made up of public and BC Parks representatives.

Though Strathcona-Westmin Provincial Park is intimately related to Strathcona Provincial Park, a decision was made during the preparation of the Strathcona Provincial Park Master Plan, to deal with Strathcona-Westmin in a separate process due to the unique purpose of the Strathcona-Westmin Provincial Park. The preparation of this plan was delayed pending approval of the Strathcona Provincial Park Master Plan.

The two parks are further entwined as a result of Westmin Resources Ltd. holding Park Use Permits for non-mining activities within Strathcona Provincial Park. These permits are related to power and water supply to the mine, and as such, are managed through the Master Plan for Strathcona Provincial Park - which identifies several actions related to these permit areas; in particular, the removal of the reservoir function of Jim Mitchell, Thelwood and Tennent Lakes.

The Strathcona Steering Committee provided general direction and input to this plan. Due to the specialized and complex nature of many of the issues, a technical advisory group made up of representatives of the Ministry of Energy, Mines and Petroleum Resources; Ministry of Environment, Lands and Parks; Westmin Resources Ltd.; and the Department of Fisheries and Oceans was formed to help prepare this plan.
Purpose of the Plan

A park master plan provides specific short-term direction for management and a long-range vision for a park. By stating the goals and objectives for a park a master plan functions both as a working document used by park managers to guide their operation of a park, and an information document informing the public as to how each component of the park system will be managed.

Master plans are based on current knowledge and values. Because these are subject to change, plans are periodically reviewed (in most cases at five-year intervals) to ensure that the stated directions and vision continue to be sound.

Specific actions detailed in the plan are based on objectives which flow from the role and goals defined by the vision statement for the Park. Actions are further refined and scheduled as the final step in the plan which prioritizes the actions for implementation.

The plan for Strathcona-Westmin Provincial Park is unique. The Park was established as an interim measure in order to accommodate the presence of an active mine within Strathcona Provincial Park. Strathcona-Westmin Provincial Park will exist only while the mine is in operation and current mineral rights are extant. This role focuses the scope of this plan.

Planning Issues

The Park was designated as a Class "B" Park to recognize the government's long-term decision to allow mining to continue in Strathcona-Westmin Provincial Park. However, a key objective is retention of the Park's resources in as close to a natural state as possible. Once mining ceases and the mine is closed, the lands will be re-integrated with Strathcona Provincial Park. Until that time, the company may continue to exercise its legal rights within the Park boundaries. Key issues relate to how these rights are exercised and how the Park's (including adjacent portions of Strathcona Provincial Park) resources and opportunities are managed and protected.

a) Relation to Strathcona Provincial Park Master Plan - The Strathcona-Westmin Provincial Park Master Plan must complement the Strathcona Provincial Park Master Plan; especially its zoning, natural resource management and park development.

b) Park Use Permit - Mine Operation and Development - Westmin Resources Ltd. holds three Park Use Permits (1261, 1363, and 1364) to cover the Myra Falls Operation. The permit area includes portions of both Strathcona and Strathcona-Westmin Provincial Parks. These permits authorize the use of park lands for mining, power generation, power transmission, and roads.
Existing Park Use Permits require ongoing review to ensure that mine operating covenants are adequate to protect environmental quality and reflect Park objectives. These covenants should address acid rock drainage, surface disturbance, short term reclamation, noise, research needs, mine traffic, environmental monitoring, protection of park features and wildlife, agency roles, and the impact on Strathcona Provincial Park. Any proposed amendments to the existing permit will have to be negotiated with Westmin Resources Ltd..


c) Mine Operations - In British Columbia, a mine may go through several phases:

*Exploration and Development Phase*

The first phase is the exploration and development stage. The Myra Falls Operation of Westmin Resources went through a long period of exploration beginning in the early 1900's. Development did not begin until 1963.

*Production Phase*

A mine goes into production, this is an indefinite stage lasting until the mine is no longer economically viable or the ore deposit is fully extracted. This is the active life of the mine.

*Closure and Reopening Phase*

Thirdly, a mine may temporarily close. There may be a period when the mine is alternately closed and then reopened depending on market conditions (i.e. metal prices).

*Final Closure and Decommissioning Phase*

The final stage is closure. This stage is reached when the Company no longer wishes to continue to mine and relinquishes the right to extract ore.

The Myra Falls Operation of Westmin Resources is an active mine and, under present conditions, will be active for the foreseeable future. Westmin Resources Ltd. is a long-term resident of Strathcona-Westmin Provincial Park. The presence of an active mine in a provincial park presents mine and Park managers with many challenges, and many opportunities for cooperation.
Final closure does not mean the end of involvement by the Company. There will be an ongoing environmental liability including a need for reclamation monitoring and management.

d) **Mine Reclamation** - Reclamation is a continuous process. Implementation of the reclamation plan is based on an annual work plan. Reclamation conditions will reflect the requirements of the Ministry of Energy, Mines and Petroleum Resources' Reclamation Permit M-26 with guidance from the Ministry of Environment, Lands and Parks (BC Environment and BC Parks), Department of Fisheries and Oceans and Environment Canada through the Vancouver Island Mine Development Review Committee.² Appendix E provides a summary of Reclamation Permit M-26.

e) **Interagency Cooperation** - The overlapping jurisdictions and potential for broader ecological consequence require that working relationships be defined and formalized. Figure 2 summarizes the roles and relationships of the agencies involved.

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² The Vancouver Island Mine Development Review Committee is an inter-agency committee chaired by Ministry of Energy, Mines and Petroleum Resources with representatives from the Ministry of Forests; from each branch of the Ministry of Environment, Lands and Parks; Ministry of Agriculture and Fisheries; Department of Fisheries and Oceans; Environment Canada, and the Ministry of Transportation and Highways, and is charged with reviewing mineral exploration and mining applications on Vancouver Island.
Figure 2

AGENCY RELATIONSHIPS

BC PARKS

Advise Parks of the orders given under their permits and regulations
Advising of issues and problems
Authorize to Mine in Park by PUP
Request permission for surface disturb.
Notify of orders by other agencies

EMPR
(Mines)

BC ENVIRONMENT
(Env Protection)

BC ENVIRONMENT
(Water Management)

WESTMIN RESOURCES

ENV CAN
(Env Protection)

DFO
(Habitat Protection)

PERMIT ISSUED

BC PARKS
- Authorizes mine to use parkland with a park permit
- Ensures that conditions of Park Use Permit are met

NO PERMIT ISSUED

[1] ENERGY, MINES AND PETROLEUM RESOURCES (EMPR) - STATUTORY AUTHORITY FOR:
- Issuance of mineral lease
- Approval of mining plans, reclamation plan
- Monitoring compliance
- Administration of mining regulations
- Setting and administering bonding
- Chairing Vancouver Island Mine Development Review Committee

[2] BC ENVIRONMENT, ENVIRONMENTAL PROTECTION - STATUTORY AUTHORITY FOR:
- Authorizing discharge of contaminants, solid waste and effluent from mine and mill
- Administration of provisions of Waste Management Act
- Monitoring compliance with Waste Management; permit and bonding under review

[3] BC ENVIRONMENT, WATER MANAGEMENT - STATUTORY AUTHORITY FOR:
- Authorizing the use of water by the mine, including impoundments for hydro-electric generation

[4] ENVIRONMENT CANADA, ENVIRONMENTAL PROTECTION
- Monitors water quality

[5] DEPARTMENT OF FISHERIES AND OCEANS (DFO) - HABITAT PROTECTION
- Enforces provisions of Fisheries Act
Background Summary

Strathcona-Westmin Provincial Park (Figure 3) is the latest designation for an area of land at the centre of Strathcona Provincial Park. This land is singled out for special designation because of the mineral values and the decision by the provincial government to allow exploration and mining in this area. The land was removed from Strathcona Provincial Park in 1965 and designated a Class B park. The boundaries, Park classification and Park name have changed during the intervening years. The current boundaries encompass the mining lease and claims held by Westmin Resources Ltd. (3,328 ha). The mine has been in operation since 1966 and it is expected to operate in the foreseeable future depending on commodity prices and the discovery of new reserves. The present Park Use Permit authorizing the use of park lands for mining expires on May 31, 2012.

Figure 3
An operating mine in a provincial park is an anomaly. The presence of a rich ore deposit and a long history of mineral exploration and alienation allowed by previous legislation have spawned much controversy over the years. In 1986, as one repercussion of a Supreme Court decision, government decided to allow exploration of several mineral claims within Strathcona Provincial Park. This expansion of apparent mining activity sparked public criticism, civil disobedience and the arrests of 64 protesters.

As a result of this criticism and protest, government appointed a committee, the Strathcona Provincial Park Advisory Committee, to review the decisions made for Strathcona Provincial Park. Strathcona-Westmin Provincial Park was included in the terms of reference. In June of 1988 this committee presented its findings in the report "Restoring the Balance". The recommendations of this report were accepted by government and form the basis for much of this Master Plan and the Strathcona Provincial Parks Master Plan. A key recommendation was that Westmin Resources Ltd. be permitted to stay and that it be recognized as a nonconforming user. One of the most significant results was the formation in December 1988 of the Steering Committee composed of BC Parks and public representatives to oversee the preparation of the Strathcona Provincial Park Master Plan. The Committee was also charged with supervising the preparation of the Strathcona-Westmin Master Plan.

The Park is located in the mountainous core of Strathcona Provincial Park, 90 km by road southwest of Campbell River at the south end of Buttle Lake, on the leeward side of the Vancouver Island Ranges of the Insular Mountains. This is a very rugged range forming the spine of Vancouver Island. The dominant feature is Mount Myra (1,808 m). Much of the Park is part of a bedrock formation called the Sicker Group, a heavily mineralized zone of volcanic rock extending from near Cowichan Lake north to Zeballos. This formation's mineral potential has been explored extensively and has hosted several mines, including the Myra Falls Operations of Westmin Resources Ltd..

The mouths of Myra Creek and Thelwood Creek are located in the Park. The upper portions of these watersheds are in Strathcona Provincial Park. The mine has the potential to affect water quality in both creeks and also Buttle Lake which is located on the Park's northern border.

The Park's climate is described as maritime with mild temperatures, long cloudy periods, heavy precipitation, wet mild winters, fairly dry and cool summers, and long frost free periods. Winter snow is common with a mean annual snow pack of about 80 cm.

The Park contains three of the fourteen biogeoclimatic zones (Meidinger and Pajar, 1991) identified for the province; namely, a Coastal Western Hemlock Zone, generally in the valley bottoms up to 900 m; a Mountain Hemlock Zone, from 900 m up to 1500 m; and above that, an Alpine Tundra Zone.

The Park is entirely within the Leeward Islands Mountains Ecosection, a subdivision of the Eastern Vancouver Island Ecoregion (Demarchi, 1988). Key habitats are flood plains, estuaries, subalpine meadows, avalanche tracks and spawning streams.
The mouths of Myra and Thelwood Creeks are important habitats for Trumpeter Swans and the Park's riparian zones are significant to Roosevelt Elk and beaver. Black bears, wolves and Blacktail deer also frequent the Park.

There are several recreational opportunities in Strathcona-Westmin Provincial Park, including viewing at Lower Myra Falls and fishing at the mouth of the creeks. Strathcona Provincial Park is accessed by trails originating in the Park including the Price Creek/Cream Lake, Bedwell Lake, Tennent Lake, Mount Myra, and the Phillips Ridge Trails. The Park is accessed by paved road from Campbell River.

As part of their authorization to operate, mining companies in British Columbia are required to produce both a mine plan and a reclamation plan. The mine plan mostly involves issues which are related to the health and safety of the mine workers, and describes in detail the proposed design and locations of the underground and surface operations and the facilities, ventilation systems and traffic patterns. The reclamation plan outlines conceptual decommissioning programs and documents the annual reclamation and research activities required to protect and reclaim the surface of the land and the watercourses affected by the mine.

Reclamation plans are regularly updated by the mine owners to account for enhanced reclamation standards and improved technology. The reclamation activities of Myra Falls Operations of Westmin Resources Ltd. are reviewed annually by the Vancouver Island Mine Development Review Committee (VIMDRC) which makes recommendations to the Reclamation Advisory Committee (RAC) based in Victoria. The RAC is responsible for the provincial reclamation standards. The Chief Inspector of Mines has authority to issue reclamation permits and will only issue permits based upon recommendations of the RAC.

As a mine proceeds to final closure a mine owner usually submits an amended reclamation plan which often is referred to as a decommissioning plan. This plan defines how a mine will be closed and how the site will be left following cessation of mining activity, including long term monitoring and management of pollution control systems.

The reclamation permit is the formal approval of the reclamation plan submitted by the company. Myra Falls Operations presently holds Reclamation Permit M-26; approved in February 1989 and last amended on May 27, 1991. This amended permit currently requires Westmin Resources Ltd. to post a reclamation security of $4,000,000 with the Ministry of Energy, Mines and Petroleum Resources, and submit a preliminary decommissioning plan outlining the cost of outstanding reclamation obligations. The reclamation plan and decommissioning plans are reviewed regularly, usually every five years. A draft of this preliminary plan has been received by VIMDRC. They have forwarded their comments to RAC for its consideration in reviewing the reclamation permit. Reclamation Permit M-26 requires the Myra Falls Operations to submit a further decommissioning plan by December 31, 1995.

The reclamation security, usually called the bond, is held by the Crown to ensure that all conditions of the various permits and licences are met. Securities are required by Energy, Mines and Petroleum Resources, BC Environment and BC Parks. The security can be drawn down by
the agency holding the permit or licence at any time to pay for any costs of work not carried out by the company. In the case of Westmin's reclamation plan the present security is in the amount of $4,000,000 for the term of the permit which is five years. The present permit requires an updated plan by December 31, 1995. At that time the security will be reviewed and amended to reflect the full cost of reclamation work as detailed in the plan.