



Model Class Screening for Routine Projects in National Park Communities



Parks Canada

July 2004



Parks Canada Parcs Canada

Canada

Model Class Screening Report for Routine Projects in National Park Communities

Parks Canada Agency
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Acronyms

ASL – Above Sea Level

CEAA – *Canadian Environmental Assessment Act*

CEA – Cumulative Effects Assessment

CEAR - Canadian Environmental Assessment Registry

CPR – Canadian Pacific Railway

CPS – Canadian Parks Service

CSA – Class Screening Area

CSPR – Class Screening Project Report

EA – Environmental Assessment

LLWWTP - Lake Louise Wastewater Treatment Plant

MCSR – Model Class Screening Report

PSI – Pounds per Square Inch

RA – Responsible Authority as defined by the *Canadian Environmental Assessment Act*

RCMP – Royal Canadian Mounted Police

ROW – Right of way

The Agency – The Canadian Environmental Assessment Agency

3VC – Three Valley Confluence, the community of Jasper is located at the confluence of the Athabasca, Miette, and Maligne Valleys

1. Application of the Model Class Screening

1.1. Introduction

Seven communities are located in national parks in Canada. Each year many routine projects within these communities require an environmental assessment under the *Canadian Environmental Assessment Act (CEAA)*. In 1998, Parks Canada and the Town of Banff prepared a Model Class Screening Report to establish streamlined planning and environmental assessment procedures for a number of routine projects conducted in the town of Banff and outlying areas. By defining a uniform approach to environmental assessment, both the Town of Banff and Parks Canada were assured that routine projects and redevelopment were consistent with the objectives of the applicable plans, policy and legislation. The success of this approach led to revisions and redeclaration of the model class screening in 2003. This class screening builds on the example of Banff and applies a similar approach to the six other communities in national parks. This class screening applies to Jasper in Jasper National Park of Canada, Field in Yoho National Park of Canada, Lake Louise in Banff National Park of Canada, Wasagaming in Riding Mountain National Park of Canada, Waskesiu in Prince Albert National Park of Canada and Waterton in Waterton Lakes National Park of Canada (Figure 1.1).

CEAA is a legislated environmental assessment process designed to integrate environmental considerations in projects where there is a federal decision or responsibility, whether as proponent, land administrator, source of funding or regulator. The first type of environmental assessment under the Act is a self-directed assessment process called a screening. A screening is considered self-directed because the federal Responsible Authority (RA) determines the scope of the project subject to environmental assessment (EA) and either directly conducts or manages the EA process through the proponent.

Of projects that are subject to the *CEAA*, the vast majority will be assessed through a screening. Anticipating the potentially large number of screenings, many of which are similar and result in a limited range of predictable mitigable environmental effects, the *Act* provides for a class screening mechanism. Section 19(1) of the *Act* provides for the declaration of Class Screening Reports.

The Model Class Screening Report (MCSR) has been developed as a two-part assessment process (Figure 1.2). The MCSR is developed and supported by the Responsible Authority (RA) and declared by the Canadian Environmental Assessment Agency (the Agency). The MCSR defines the projects and the environmental planning process for the class, including procedures, requirements, time periods and follow-up programs. The Class Screening Project Report (CSPR) is the project-specific environmental assessment, which is to be prepared by the proponent in accordance with the procedures outlined in the MCSR. Together, the MCSR and the CSPR constitute the environmental class screening as per Sections 16(1) and 18(1) of *CEAA*.

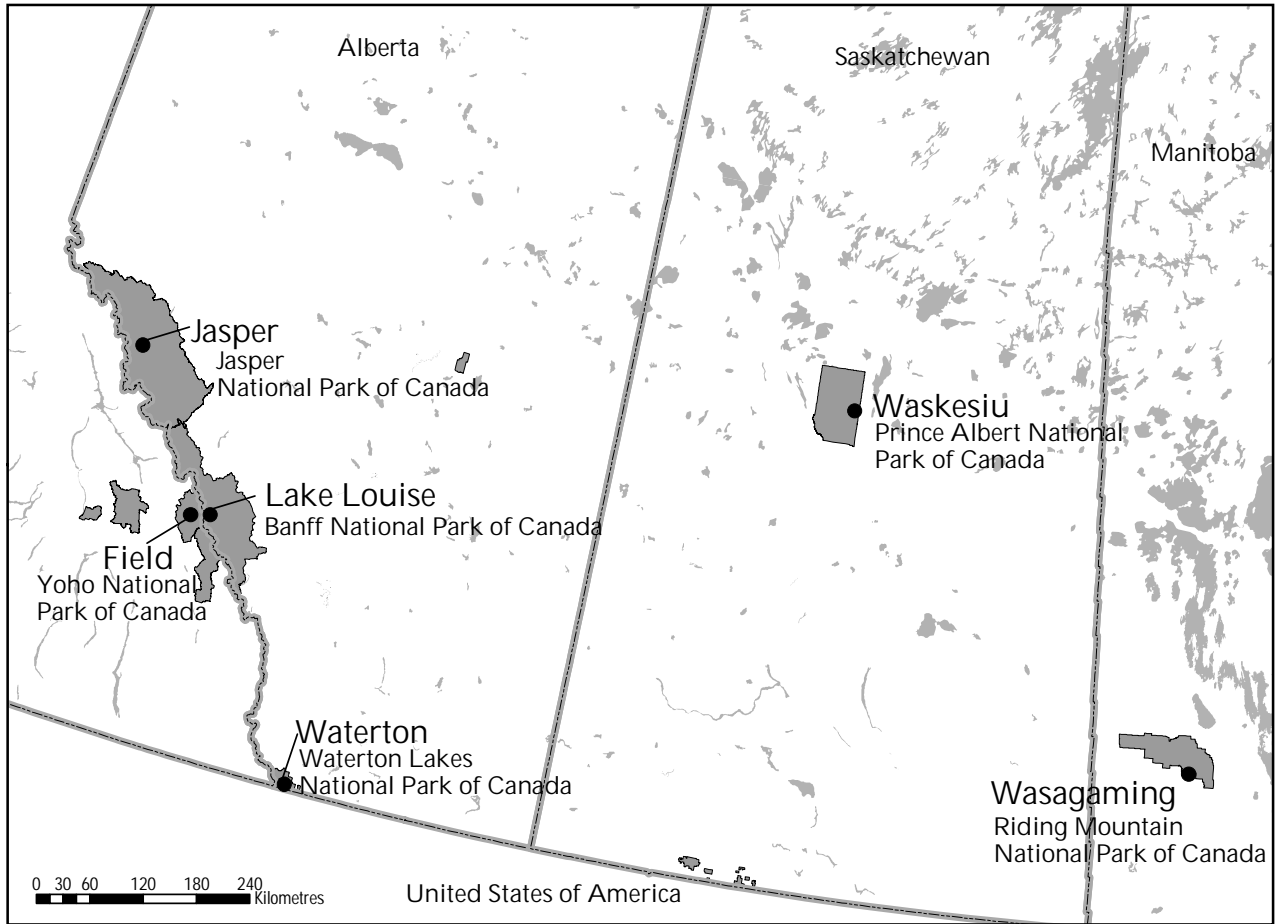


Figure 1.1 Location of Communities Covered by Model Class Screening

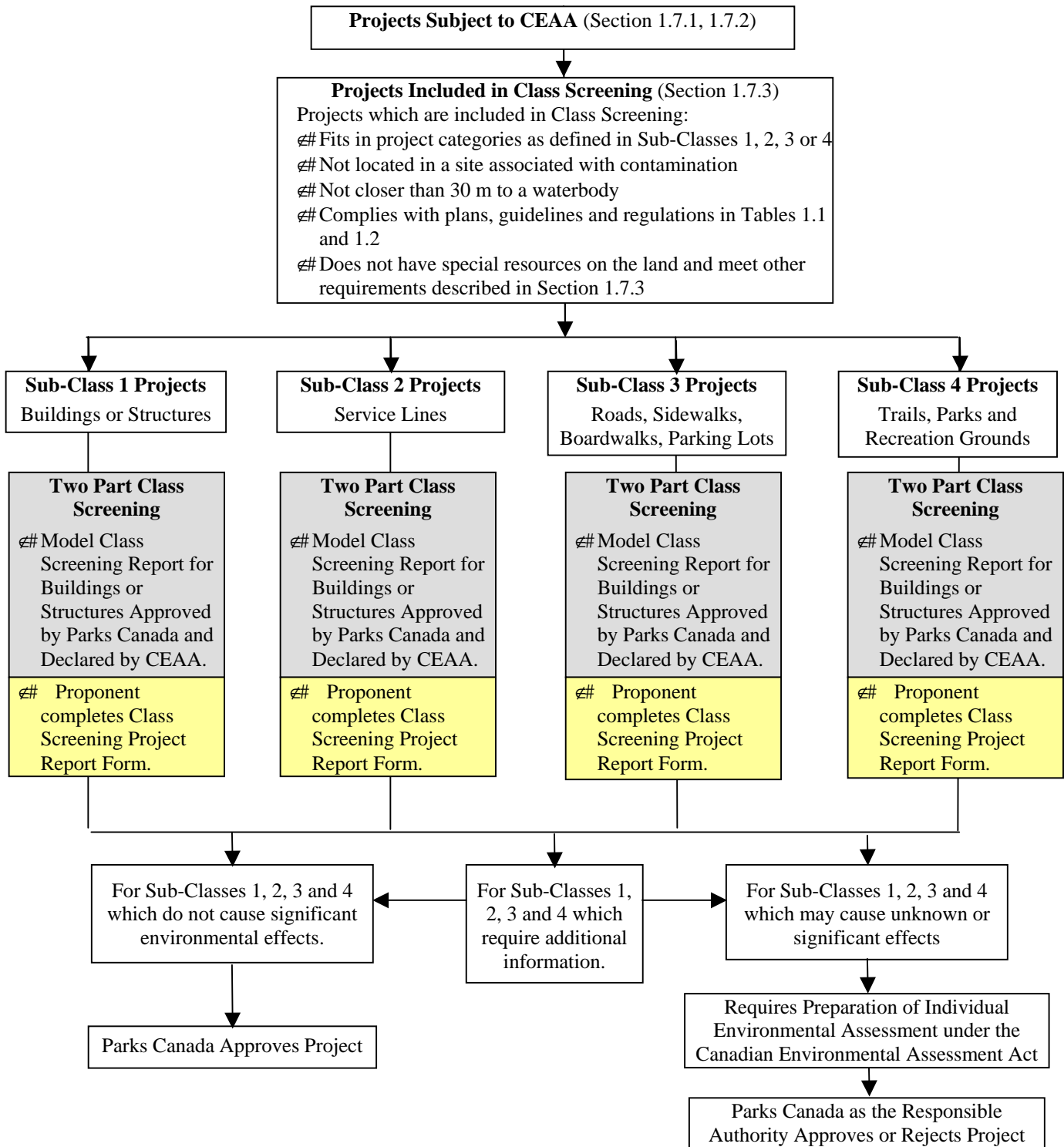


Figure 1.2 The Class Screening Process

The MCSR:

- ☞ Identifies the projects (hereto referred to as Sub-Class 1, 2, 3, or 4) subject to the MCSR;
- ☞ Defines the scope of project and scope of assessment;
- ☞ Identifies public consultation procedures undertaken in developing the MCSR;
- ☞ Outlines the procedures to be used to prepare a CSPR for individual projects;
- ☞ Describes the typical environmental settings;
- ☞ Identifies the potential environmental effects of projects subject to the MCSR;
- ☞ Presents mitigation measures to minimize potential adverse environmental effects of individual projects;
- ☞ Identifies potential cumulative impacts and appropriate mitigations;
- ☞ Identifies follow-up or monitoring requirements for individual projects; and,
- ☞ Assesses the significance of residual effects.

1.2. Preparation of the Model Class Screening Report

The MCSR streamlines and simplifies the environmental screening approval process for routine projects in the following ways:

- ☞ Many routine projects may be approved after the project proponent completes a simple CSPR form.
- ☞ The MCSR defines the process to be followed by the RA and project proponent in preparing a CSPR. This planning process will ensure the potential environmental effects and mitigation measures of projects covered by the MCSR are considered in a consistent and efficient manner during project planning, assessment, screening, and implementation. Regulatory and industry standards and the experience of current contractors and operators in the town of Banff and Parks Canada staff have been used to identify potential environmental impacts and suitable mitigation measures in the Class Screening Area.
- ☞ Site-specific information on the environment and sensitivities to impacts for each community are identified in individual chapters. These chapters also describe the current relevant infrastructure in each of the communities. The generic information included in the MCSR will provide the information required in the CSPR and therefore reduce the amount of work required to prepare a CSPR.
- ☞ The MCSR presents a compilation of generic information for various Sub-Classes of Routine Projects. This generic information includes the range of typical environmental impacts, and the range of standard mitigation procedures and residual impacts that may result should the project proceed.
- ☞ Public consultation was conducted during the development of the MCSR (refer to Section 1.4). Consultation requirements during the preparation of a CSPR are therefore reduced, as specified in Section 1.8.2.

1.3. Spatial Boundaries of the Class Screening Area

This class screening includes six communities: Field, Jasper, Lake Louise, Waskesiu, Wasagaming and Waterton (Figure 1.1). For each of the communities, two aspects of the spatial boundaries are identified. Each community has a legally defined community boundary. In addition, some communities have identified proximate outlying areas

which are not included in the community boundary, but are connected to the community infrastructure. The Class Screening Area (CSA) therefore includes the legal community boundaries and the outlying areas as identified below.

Field

Community boundary as defined in the community plan.

Outlying areas included in the CSA are:

- ⊘ The Water reservoir
- ⊘ Field cemetery
- ⊘ Field Wastewater Treatment Plant

Jasper

Community boundary as defined in the community plan.

Outlying areas included in the CSA are: Pine Bungalows, Tekarra Lodge, Alpine Village, Whistler's Campground, Wapiti Campground, Jasper House Bungalows, Becker's Roaring River Chalets, Patricia Lake Bungalows, Pyramid Riding Stables, Pyramid Lake Resort, Jasper Park Lodge, Jasper Cemetery, Lake Edith Resort Subdivision and Wastewater Treatment Plant.

Lake Louise

Community boundary as defined in the community plan.

Outlying areas included in the CSA are:

- ⊘ Lake Louise Campground
- ⊘ Lake Louise Trailer Court
- ⊘ Lake Louise Wastewater Treatment Plant
- ⊘ Parks Canada Day Use Area at Lake Louise
- ⊘ Fairview Picnic Area
- ⊘ Government Horse Corrals

Wasagaming

Community boundary as defined in the community plan.

Outlying areas will include:

- ⊘ Blocks 1, 15, 17 and 18 of the North Shore Cottage Subdivision (the North Shore Road and Clear Lake Trail are not included in the CSA)
- ⊘ Deep Bay cabin site
- ⊘ 320 Tawapit site

Waskesiu

Community boundary as defined in the community plan.

Waterton

Community boundary as defined in the community plan.

All the above areas are referred to as the Class Screening Area (CSA). Only routine projects within the CSA, as defined by the MCSR and described in 1.7.4, are covered by the MCSR.

1.4. Public Consultation

Since this class screening is based on the “Model Class Screening Report for Routine Projects within the Town of Banff and Proximate Outlying Areas”, the experience and comments from the public consultation are incorporated into this MCSR. In the development of this MCSR further consultation with stakeholders (cottage associations, lease holders, environmental groups, utility companies and other affected groups) was conducted in each community. This consultation included notification of the class screening process, meetings, making the draft document available for comment.

Subsequently, the Canadian Environmental Assessment Agency (The Agency) published a notice in local media and other appropriate means inviting comments from the public on the appropriateness of using the proposed MCSR. This public review occurred over 30 days. The Agency also sent direct notices regarding the availability of the report to interested organizations and individuals. The Agency ensured that all of the relevant comments received were adequately addressed within the MCSR.

The projects covered by this class screening are routine and have predictable and mitigable environmental effects and therefore not of concern to the public. Extensive consultation with stakeholders on the MCSR before submission to The Agency did not result in any comments in any of the communities. Consequently, as with the revised Banff Class Screening, there will be no public review for individual projects.

1.5. Canadian Environmental Assessment Registry

The purpose of the Canadian Environmental Assessment Registry (the Registry) is to facilitate public access to records relating to environmental assessments and to provide notice in a timely manner of the assessments. The Registry consists of two components - an Internet site and a project file.

The Internet site is administered by the Agency. The responsible authority and the Agency are required to post specific records to the Internet site in relation to a model class screening report and any related class screening project reports.

The Agency will post records required during preparation of a model class screening report (e.g., public notices regarding public participation).

Upon declaration of the model class screening report, the Act requires responsible authorities to post on the Registry every three months a statement of projects for which a class screening was used. The statement should be in the form of a list of projects, and will include:

- the title of each project for which the model class screening report was used;
- the location of each project; and
- the date of the decision for each project.

The project file component is a file maintained by the responsible authority during an environmental assessment. The project file must include all records produced, collected

or submitted with respect to the environmental assessment of the project, including class screening projects reports and all records included on the Internet site. The responsible authority must maintain the file, ensure convenient public access, and respond to information requests in a timely manner.

Further information regarding the Canadian Environmental Assessment Registry can be found in "The Canadian Environmental Assessment Registry: Practitioners' Guide", prepared by the Agency.

1.6. Amending the Model Class Screening Report

The purpose of an amending procedure is to allow for the modification of the MCSR after experience has been gained with its operation and effectiveness. The reasons for such modifications may include:

- ⌘ Clarification of ambiguous areas of the document and procedures.
- ⌘ Streamlining or modifying the planning process in areas where problems may have arisen.
- ⌘ Minor modifications and revisions to the scope of assessment to reflect new or changed regulatory requirements, policies or standards.
- ⌘ Extension of the application of the MCSR to projects that were not previously included but are analogous to projects included in the class definition.

The following amending provisions are available if any changes are required. The MCSR will be in operation for a five-year period. If changes are required during that ten-year period, depending on the nature of changes, the Agency will:

1. Amend the MCSR

The Agency will review the proposed modifications and, if they are consistent with requirements of the *CEAA* and:

- ⌘ Are minor;
- ⌘ Represent editorial changes intended to clarify or improve the screening process;
- ⌘ Do not materially alter either the scope of the projects subject to the MCSR or the scope of the assessment required for these projects; and
- ⌘ Do not reflect new or changed regulatory requirements, policies or standards

The Agency will accept the changes and add the amended document to its public registry while not changing the declaration period.

2. Amend the MCSR with conditions

The Agency may accept the amended document with conditions and add the report to the public registry while not changing the declaration period.

3. Declare the Revised MCSR

Following the requirements of Section 19 of the Act and after consulting with the responsible authority, the Agency may declare the revised report for the remaining balance of the declaration period or for a new five year period when:

- ⌘ The proposed amendments are considered to be substantial; or
- ⌘ The proposed amendments represent modifications to the scope of the projects

subject to the class or the scope of the assessment required for these projects. The Agency will add the amended document to its public registry.

1.7. Routine Projects Covered by the Model Class Screening Report

The Class Screening Process applies to projects that:

- ⚡ Are relatively routine or repetitive;
- ⚡ Usually result in environmental effects that are well understood or predictable; and
- ⚡ The environmental effects can be mitigated using accepted methods such that significant environmental effects are unlikely to occur.

1.7.1. Projects Subject To CEAA

This MCSR applies to ‘construction, modification, operation, maintenance or repair and decommissioning/abandonment of buildings, service lines, roads, sidewalks, boardwalks, parking lots, trails, parks, and recreational grounds’. These projects which occur relatively frequently, typically result in environmental effects that are predictable and well understood, and can be easily mitigated using accepted mitigation methods. In order for the *CEAA* to be triggered a proposed development must:

- ⚡ Be a “project” under the *CEAA*. A “project” is either an undertaking in relation to a physical work such as any proposed construction, operation, modification, decommissioning, abandonment or other undertaking; or a physical activity not relating to a physical work that is specified as a project in the *Inclusion List Regulations*;
- ⚡ Involve a federal authority that is required to exercise or perform one or more of the following duties relating to the project:
 - Propose the project;
 - Grant financial assistance to the project;
 - Grant an interest in land in order for the project to be carried out; or
 - Exercise a regulatory duty listed in the *Law List Regulations* (paragraph 23(a) and (b)) that enables the project, such as issuing a permit or granting an approval; and,
- ⚡ Not be listed in the *Exclusion List Regulations* to the *CEAA*.

1.7.1.1. Projects

The projects, as defined under the *CEAA*, that are included in this MCSR are:

- ⚡ The stabilization of a slope and physical activities to control erosion or drainage are defined as projects by the *Inclusion List Regulations* Section 9.1.
- ⚡ The establishment, expansion and relocation of trails or day-use areas are defined as projects by the *Inclusion List Regulations* Section 13.5.
- ⚡ Undertakings in relation to the following physical works: buildings, other structures, service lines, roads, sidewalks, boardwalks, parking lots, trails, parks, and recreational grounds. Undertaking is broadly defined and can include: construction, modification, operation, maintenance or repair and decommissioning/abandonment.

Continued occupation and operation of a facility or structure on leased land constitutes a project under *CEAA*.

1.7.1.2. “Triggers”

In order for environmental assessment to be required, one of the following must be true.

The ‘Land’ Trigger

Section 5(1)(c) of the Act requires an assessment where a Federal Authority “has the administration of federal lands and sells, leases or otherwise disposes of those lands or transfers the administration and control of those lands or interests to Her Majesty in right of a province, for the purpose of enabling the project to be carried out in whole or in part”.

The communities and all of the CSA is located on federal lands owned by Parks Canada. Hence, issuance or replacement of land leases in the town potentially trigger an environmental assessment, based on the granting of an interest in land to allow a project to be carried out. Leases in the communities are issued in the following circumstances:

- ⊘# Where previously undisturbed land is leased for the first time by Parks Canada;
- ⊘# Where leases relating to smaller parcels of land are surrendered to Parks Canada in exchange for a new lease covering the entire area, renewal of leases, or issuance of new leases. Renewal of existing leases occurs when leases that expire are renewed based on a renewal clause; and,
- ⊘# Where new leases are issued to replace expired leases.

The term lease in *CEAA* Section 5(1)(c) includes each of these three situations, provided that the land is leased “for the purpose of enabling the project to be carried out in whole or in part”.

Therefore, the following applies to issuing of leases:

- ⊘# New leases issued for the purpose of development trigger *CEAA*.
- ⊘# New leases issued for the continued occupation and operation of a facility or structure trigger *CEAA*.
- ⊘# Renewal of existing leases which have a perpetual renewal clause do not trigger *CEAA*.
- ⊘# Continued occupation and operation of a facility or structure on leased land constitutes a project under *CEAA*.

Law List Trigger

An environmental assessment is required when Parks Canada is not the proponent of the project, but as a Federal Authority (under Section 5(1)(d) of *CEAA*) “. . . issues a permit or licence, grants an approval or takes any other action for the purpose of enabling the project to be carried out in whole or in part”.

The relevant regulations are specified in the *Law List Regulations*. The relevant sections are listed below.

- ⌘ Section 11(1) of the *National Parks General Regulations* gives Parks Canada the authority to issue permits for “. . . the removal of natural objects for construction purposes within a Park.” Natural objects are defined as soil, sand, gravel, rock, mineral, fossil or other object of natural phenomenon, not included within the terms flora and fauna. Therefore projects that require the removal of natural objects trigger CEAA. This includes projects requiring excavation.
- ⌘ Section 12(1) of the *National Parks General Regulations* gives Parks Canada the authority to issue permits for “. . .authorizing the removal or destruction of any flora or natural objects for park management purposes”.
- ⌘ Section 5(1) of the *National Parks Building Regulations* gives Parks Canada the authority to issue permits for any construction of buildings including initial excavation and demolition.

Proponent Trigger

In some cases the work will be conducted by Parks Canada. Section 5(1)(a) of the *CEAA* states: “where a federal authority is the proponent of the project and does any act or thing that commits the federal authority to carrying out the project in whole or in part.” As a result, projects conducted by Parks Canada require an environmental assessment.

1.7.2. Routine Projects Excluded by the CEAA

Some undertakings in relation to a physical work may not require an environmental assessment under the *CEAA* because they are included in the *Exclusion List Regulations*. These projects are therefore not included in the MCSR. The *CEAA* defines Excluded Projects under Section 7(1) whereby an environmental assessment of a project is not required when:

- ⌘ The project is described in an exclusion list;
- ⌘ The project is to be carried out in response to a national emergency for which special temporary measures are being taken under the “*Emergencies Act*”;
- ⌘ The project is to be carried out in response to an emergency and carrying out the project forthwith is in the interest of preventing damage to property or the environment or is in the interest of public health or safety.

There are *Exclusion List Regulations* that list projects and classes of projects that do not require an environmental assessment under the *CEAA*. Schedule II to *Exclusion List Regulations* specifically addresses certain kinds of national parks projects. The exclusions differ depending on location. Schedules I, II, and III of the *National Parks Lease and Licence of Occupation Regulations* of the *Canada National Parks Act* delineate the areas to which the exclusions are applied. In most cases, the areas listed on these schedules are the community boundaries, however, exceptions exist and decisions as to whether an environmental assessment is necessary will be based on the definitions in the Schedule. Based on that schedule, the following routine projects which occur in the Class Screening Area (CSA) are excluded and will not require assessment under the *CEAA*. They therefore are not included in this MCSR

This section applies to all areas not listed in *Schedules I, II, and III of the National Parks Lease and Licence of Occupation Regulations of the Canada National Parks Act*:

The proposed modification, maintenance or repair of an existing structure, outside the communities, including its internal fixed structures, that would not:

- ⊘# Increase the footprint or height of the structure;
- ⊘# Involve a heritage structure;
- ⊘# Involve a change in the method of sewage disposal, or an increase in the amount of sewage, waste or emissions;
- ⊘# Involve any excavation beyond the footprint of the structure;
- ⊘# Create a need for related facilities such as parking spaces; or
- ⊘# Involve the likely release of a polluting substance into the environment (A polluting substance is a substance, either natural or man-made, that can potentially have adverse effects on the environment).

This section applies to projects inside the areas listed in *Schedules I, II, and III of the National Parks Lease and Licence of Occupation Regulations of the Canada National Parks Act*.

The proposed modification, maintenance or repair of an existing structure, including its internal fixed structures, in the communities that would not:

- ⊘# Be carried out beyond lands subject to an existing lease;
- ⊘# Increase the footprint or height of the building by more than 10 percent;
- ⊘# Involve a heritage structure;
- ⊘# Be carried out in, on or over a water body;
- ⊘# Involve the likely release of a polluting substance into the environment; or
- ⊘# Involve the cutting of indigenous trees.

The proposed modification, maintenance or repair of an existing buried water, stormwater, sewer, gas, electricity or telephone service line, other than a line crossing a water body, where the modification, maintenance or repair would:

- ⊘# Take place in a built-up area;
- ⊘# Not involve the cutting of indigenous trees;
- ⊘# Not be carried out in or on or within 30 m of a water body;
- ⊘# Not involve the likely release of a polluting substance into the environment;
- ⊘# Not increase the operating capacity of the water, stormwater, sewer, gas, electricity or telephone service line; and
- ⊘# Not involve a risk of physical harm to mammals.

The following sections apply to the entire Class Screening Area:

- ⊘# The proposed maintenance or repair of an existing sidewalk, boardwalk or parking lot.
- ⊘# The proposed maintenance or repair of an existing fence.
- ⊘# The proposed construction, installation, maintenance or repair of a sign within an existing right of way or that is carried out at a distance of less than 15 m from an existing building.

- ⊘# The proposed maintenance or repair of an existing road, including pull-off areas, that would be carried out on the existing right of way and would **not**:
- ⊘# Result in the likely release of a polluting substance into a water body; and
- ⊘# Involve the application of a dust control product or salt to the road or of a pest control product to the areas adjacent to the road.

1.7.3. Routine Projects Not Suited to the MCSR

Several activities conducted in the communities and outlying areas do not meet the class screening requirements of being routine, repetitive activities with known, easily mitigable environmental effects. These projects require further investigation to determine the level of environmental impacts, and therefore, an individual assessment will be required. The projects that are excluded from this MCSR are identified by the following thresholds.

1.7.3.1. Project Size

Construction and modification projects that are outside the size or density specified in the management plans for the CSA do not fit within this MCSR.

The community plans, regulations and directives defining these parameters for inside the community boundaries are listed in Table 1.1. The park management plans defining these parameters for outside the community boundaries, but within the CSA are listed in Table 1.2.

Table 1.1. Applicable community plans, regulations and directives within community boundaries.

Field Community Plan
Field Land Use Directives (currently draft)
Regulations Respecting the Use of Land in the Town of Jasper
Jasper Community Land Use Plan
Lake Louise Community Plan
Lake Louise Community Plan Implementation Guidelines
Lake Louise Land Use Directives (currently draft)
Wasagaming Community Plan
Waskesiu Community Plan
Waskesiu Land Use Directive
Waterton Lakes National Park 2000 Waterton Community Plan and the Waterton Community Land-Use Directive contained within it.
Banff National Park Directive 17, Guidelines for Development Projects

Table 1.2. Applicable management plans and guidelines for areas outside of community boundaries.

Banff National Park Management Plan Jasper National Park of Canada Management Plan Yoho National Park of Canada Management Plan Prince Albert National Park of Canada Management Plan Riding Mountain National Park Management Plan Banff National Park Directive 17, Guidelines for Development Projects
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If the project increases the amount of wastewater for either the Field Wastewater Treatment Plant or the Lake Louise Wastewater Treatment Plant, it may be excluded from the MCSR.

1.7.3.2. Project Location

- ⚡ Projects must conform with the plans, guidelines and directives listed in Table 1.1
- ⚡ New projects which are planned for areas inside the Waterton community boundaries in areas zoned as Environmental Reserve Districts follows are not covered by this MCSR.
- ⚡ Projects outside the community boundaries and outside the Class Screening Area are not covered by this MCSR
- ⚡ New buildings in proximate areas outside the communities; however, inside the CSA, may not be covered by this MCSR.
- ⚡ Modifications, repairs, maintenance, abandonment and decommissioning of facilities that occur outside the town boundary inside the CSA are covered by the MCSR if they adhere to the management plans and guidelines listed in Table 1.2.
- ⚡ Projects that impact the following *sensitive resources* may require a separate assessment.
 - land within 30 m of water bodies
 - projects that occur on contaminated sites
 - sensitive resources identified in Table 1.3

The need for a separate environmental assessment will be at the discretion of the responsible authority.

Table 1.3 Sensitive resources for each of the communities

Community	Sensitive Resources
Field	Critical wildlife areas including movement corridors
Jasper	Critical wildlife areas including movement corridors Areas which contain old growth forests, aspen, and balsam poplar. See also Appendix 2
Lake Louise	Critical wildlife areas including movement corridors
Wasagaming	See Appendix 5
Waskesiu	See Appendix 7
Waterton	Critical wildlife areas including movement corridors

1.7.3.3. Project Type

Projects not permitted by the zoning designations defined in appropriate plans, guidelines and regulations as listed in Tables 1.1 and 1.2 are not covered by this MCSR.

New leases in Jasper in areas not listed in Schedules I, II, and III of the *National Parks Lease and Licence of Occupation Regulations* of the *Canada National Parks Act* will not be covered by this class screening and will require an individual environmental assessment.

In the North Shore Subdivision near Wasagaming, the Clear Lake Trail and North Shore Road are not included in the class screening.

Although species at risk may pass through the communities, no species at risk are known to reside in the communities. In the future, however, individuals may move into the communities or new species may be considered endangered. Projects that are not suitable for application of the model class screening also include those that may adversely affect species at risk, either directly or indirectly (for example by adversely affecting their habitat). For the purposes of this document, species at risk include:

- ⌘ species identified on the List of Wildlife Species at Risk set out in Schedule 1 of the *Species at Risk Act (SARA)*, and including the critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the *Species at Risk Act*.
- ⌘ species that have been recognized as "at risk" by COSEWIC or by provincial or territorial authorities.

1.7.4. Summary of Routine Projects Subject to Class Screening

The projects subject to this MCSR are defined as: routine projects in the communities of Field, Jasper, Lake Louise, Wasagaming, Waskesiu, and Waterton and Outlying Proximate Areas, as defined within the Class Screening Area. This class is comprised of four sub-classes:

Sub-Class 1: Buildings

Project definition includes construction, operation, modification, maintenance or repair and decommissioning and abandonment of a building or structure, including heritage buildings, as allowed by the management plans, guidelines, and directives listed in Table 1.1 and 1.2. New buildings outside of the community boundaries are not included in the class. Project activities covered by the MCSR are described in Sub-Class 1.

Sub-Class 2: Service Lines

Project definition includes construction of new service lines (underground gas, stormwater, water, sewage, electricity and communication [e.g. telephone and cable] and aboveground power lines and communication). Operation, modification, maintenance or repair, and decommissioning and abandonment of existing lines needs only to be assessed when activities occur outside the areas listed in Schedules I, II, and III of the National

Parks Lease and Licence of Occupation Regulations of the Canada National Parks Act but within the CSA, or within those areas and involve the likely release of a polluting substance into the environment; increase the operating capacity of the line; or involve a risk of physical harm to mammals. Project activities covered by the MCSR are described in Sub-class 2.

Sub-Class 3: Roads, Sidewalks, Boardwalks and Parking Lots

Project definition includes modification, maintenance and repair of existing roads within existing rights-of-way or easements only when maintenance and repair activities could result in the likely release of a polluting substance into a water body; or involve the application of a dust control product or salt to the road, or of a pest control product to the areas adjacent to the road. It also includes construction, modification, decommissioning and abandonment of sidewalks, boardwalks and parking lots up to 75 stalls. Parking lots with more than 75 stalls require individual environmental assessment. Project activities covered by the MCSR are described in Sub-class 3.

Construction of new roads and modification of roads outside of existing rights-of-way are not covered under this MCSR and will require an individual environmental assessment under the Act. Any activities associated with parking lots over 75 stalls or construction of parking lots in previously undisturbed areas are not covered under this MCSR, and will require an individual environmental assessment under the Act.

Sub-Class 4: Trails, Parks, and Recreation Grounds

Project definition includes construction, modification, maintenance or repair, and decommissioning and abandonment of trails, parks and recreation grounds. Project activities covered by the MCSR are described in Sub-class 4.

1.8. Model Class Screening Process

1.8.1. Steps in the Class Screening Process

There are four steps in the Class Screening Process (Figure 1.2):

Step 1: Determining whether a project requires a Screening,

Step 2: Determining whether a project fits within the MCSR,

Step 3: Determining whether a project has significant environmental effects, and

Step 4: Determining whether a project should be reclassified to an individual assessment.

Step 1: Determining whether a screening is required.

Projects that require screening have been described in Section 1.7. Based on this information, Parks Canada as the RA, will determine whether an environmental screening is required. If Parks Canada determines that no screening is required, the project may proceed.

Step 2: Determining whether a project fits within the Model Class Screening Report.

If a project does require a screening, the next step is to determine whether the project fits within one of the four sub-classes:

Sub-Class 1: Buildings, including construction, modification, operation, maintenance or repair and decommissioning and abandonment of a building or structure, including Heritage Buildings;

Sub-Class 2: Service lines, including construction of new service lines and modification, operation, maintenance or repair, and decommissioning and abandonment of existing lines;

Sub-Class 3: Roads, including modification, maintenance or repair of existing roads within existing rights-of-way, and construction, modification, decommissioning and abandonment of sidewalks, boardwalks and parking lots up to 75 stalls; and

Sub-Class 4: Trails, parks and recreation grounds, including construction, modification, maintenance or repair, and decommissioning and abandonment of trails, parks, and recreation grounds.

The proponent can determine if their project fits within a sub-class by reviewing Section 1.7. Proponents whose projects fall within one of the sub-classes will be required to complete the Class Screening Project Report (CSPR) form applicable to their sub-class and submit the form to the appropriate office as indicated on the form.

Step 3: Determining whether a project has significant environmental effects.

Completion of the CSPR form will provide Parks Canada with sufficient information to determine the likely environmental effects of the project. If the project is determined to have no significant adverse environmental effects when standard mitigation procedures are implemented, the proposed project can be approved by Parks Canada. Detailed information on preparing CSPR forms for each sub-class is provided in Sections 2 through 11 of this report. Parks Canada, as the RA, will provide project approvals based on the following criteria:

- ☞ Projects are routine, repetitive and use well-understood technology;
- ☞ Create no significant environmental impacts;
- ☞ Use recognized mitigation methods to reduce impacts;
- ☞ Comply with the appropriate management plans, guidelines and regulations as listed in Table 1.1 and 1.2, and
- ☞ Do not negatively impact sensitive areas.

Parks Canada may request additional information if there is not sufficient information on the CSPR form to make a determination regarding significance.

Step 4: Determining whether a project should be reclassified to an individual assessment.

A project may not be approved under the MCSR, and may be reclassified to require an individual assessment if:

- ☞ There is potential to cause a significant adverse effect that cannot be readily mitigated;
- ☞ The environmental effects are uncertain; or
- ☞ The project is excluded for reasons explained in section 1.7.3; or
- ☞ For other reasons, Parks Canada considers the project unsuitable to the class screening process.

In this case, the project will be removed from the class screening process and the proponent will be required to prepare an individual assessment under CEAA.

1.8.2. Responsibilities, Time Lines and Public Review

The responsibilities of the proponent and Parks Canada in the Class Screening Process are outlined below:

- ⚡ It will be the responsibility of the proponent to prepare a Class Screening Project Report (CSPR) form.
- ⚡ It will be the responsibility of the proponent to ensure all information provided in the CSPR form is accurate. The proponent will be required to sign a statement to this effect. If it becomes known that inaccurate information has been provided by the proponent, any approval will be invalidated.
- ⚡ It will be the responsibility of Parks Canada to:
 - Provide the necessary forms, appropriate information and advice to the proponent;
 - Review the completed screening form(s); and
 - Approve or reject the proposed development pursuant to Section 20(1) of the Act, or reclassify the project to an individual assessment.

Parks Canada, as the RA, will review all projects and provide a response to the proponent as soon as possible, and within the following time frames when there are no outstanding issues:

- ⚡ For projects that fit under the MCSR: within 14 days of submission of the CSPR form.
- ⚡ For projects that are reclassified from the MCSR to an individual assessment, notification of this reclassification will be provided within 14 days of submission of the CSPR form.

2. Field, Yoho National Park of Canada

2.1. Spatial Boundaries of the Class Screening Area

The Model Class Screening for Routine Projects in Field includes projects that occur within the village boundary as defined in the Field Community Plan, July 1999. In addition, the water reservoir, Field cemetery, and Field Wastewater Treatment Plant are proximate outlying areas that will be included in the class screening.

The above areas will be considered part of the Class Screening Area (CSA). Only routine projects within the CSA are covered by the MCSR.

2.2. Environmental Setting

The village of Field is located in Yoho National Park just west of the Continental Divide in the Rocky Mountains, at an elevation of 1243 m above sea level (ASL). The village covers 38 hectares and falls within the Kicking Horse Major Watershed. Field is situated on an alluvial fan at the base of Mount Stephen and borders the Kicking Horse River Flood plain. The regional environmental setting will be described followed by a more detailed description of the local setting. Tables 2.1 and 2.2 summarize the environmental sensitivities of the ecosites and land use districts.

2.2.1. Regional Setting

At a regional scale (1:50,000), the Ecological Land Classification (Achuff et al. 1996 and Wallis et al. 1996) details landform, soil, vegetation and wildlife information, with increasing levels of detail progressing from ecoregion, to ecosection to ecosite. Ecoregions are based primarily on vegetation, which reflects microclimate, and are divided into ecosections that are based on broad landform, drainage and soil characteristics. Ecosections are further divided into ecosites, which are based on specific soil and vegetation differences. Ecosites found in the Study Area are shown in Figure 2.1.

The Montane Ecoregion is found at lower elevations in Yoho National Park and is characterized by vegetation types dominated by Douglas fir and white spruce; aspen poplar; and, grasslands on drier sites.

White spruce, Douglas fir and aspen dominate the area in and around the village of Field. Lodgepole pine forests are a result of extensive fires around the turn of the century. Wetland complexes are found further west on the Kicking Horse River near Ottertail flats and Leancoil. The Montane Ecoregion occurs in the valley bottom from the top of Field Hill on the Trans-Canada Highway to the west boundary of Yoho.

The Subalpine Ecoregion, which occurs at elevations above the Montane, is cooler and moister, and is divided into Lower and Upper Subalpine. The dominant vegetation in the Lower Subalpine is closed coniferous forest, with mature forests dominated by Englemann spruce and Subalpine fir. The upper boundary is about 2000m ASL. The

Upper Subalpine vegetation is transitional between Lower Subalpine closed forest and the treeless Alpine tundra, with open forests and stunted tree growth.

2.2.2. Air Quality

Air quality within the village has not been affected by development to date, but local activities could affect it. Idling train locomotives, traffic on the Trans Canada Highway, and extensive use of residential wood burning heaters can contribute to occasional deterioration in air quality, particularly on windless, winter days. While current levels of air pollution do not appear to pose a threat to ecological integrity, many people are concerned by the air quality during these periods.

2.2.3. Hydrology, Water Quality and Aquatic Resources

The village is located on the banks of the Kicking Horse River, a Canadian Heritage River. The Kicking Horse River originates at the Great Divide adjacent to the Trans Canada Highway approximately 13 km east of Field. Sherbrooke Creek and Yoho River drain from the Wapta Icefields and feed into the Kicking Horse River above Field. Most streams in Yoho have steep gradients and are influenced by glacial melt waters diurnal and seasonal fluctuations.

The village of Field discharges treated effluent into the Kicking Horse River, which impacts water quality. Effluent coliform and bacterial levels are monitored on a regular basis. The Field Waste Water Treatment Plant will be upgraded in 2003 to accommodate future development in Field.

Introduced game species such as Rainbow, Cutthroat and Brook and native Bull Trout are present in the Kicking Horse River and in adjacent lakes and drainages. Rainbow-Cutthroat hybrids have been found in Emerald Lake.

2.2.4. Landforms and Soils

Landforms in the area are glacial and fluvial in origin. Fluvial influences and landslides are the dominant processes at present. Field is located on the Stephen Creek alluvial fan with stratified coarse to fine textured Eutric Brunisols. Highly faulted rock layers characterize the geology of the area, primarily limestone with some quartzite outcrops.

The upper Kicking Horse Valley is characterized by steep sided valley walls with slopes ranging from 0 – 90%. Slopes within the village range from 0-45%. Large landslides off Cathedral Mountain approximately 5km east of Field have occurred in very recent history. Several locations on steeper slopes just outside the village boundary at the base Mt. Stephen and Mt. Dennis are unstable. Small slides and soil creep have occurred. The slopes above Second Avenue, and the Stephen Creek Valley where potential for landslides is serious, should not be disturbed.

Stephen Creek runs on the east boundary of Field and has been channeled to prevent the creek from meandering across the alluvial fan. Channelization interrupts the natural processes in the area but protects the village and the CPR (Canadian Pacific Railway).

More detailed descriptions of the soils are associated with the ecotypes in the following section.

2.2.5. Vegetation

The natural vegetation is characterized by a mixed forest community. White spruce, Douglas fir and aspen are the dominant tree species in Field. The majority of the land within the townsite is developed, however there are large areas off Second Avenue that are undisturbed.

Fireside Ecosection 3 (FR 3)

FR 3 encompasses the central Field commercial area and the majority of residential lots up to Second Avenue. Slopes range from 0-30% with a mixedwood white spruce and lodge pole pine forest. Second Avenue contains large undisturbed areas. Some of these areas have been designated as green space; some areas are slated for future lot releases.

Hillsdale Ecosection 6 (HD 6)

HD 6 includes CPR (Canadian Pacific Railway) lands and the visitor services upon entry to Field. The terrain is generally low grade and is adjacent to the Kicking Horse River. This area is characteristic of a flood plain with shrubby and herbed vegetation.

Dry Gulch Ecosection 5 (DG5/7)

This ecosection includes two small areas within the Field village boundary. The NE corner section does not include any facilities. The southwest section includes 3 residences and the future site of the Field Wastewater Treatment Plant. The terrain is generally steep, with sections of exposed bedrock, and supports an aspen/white spruce-Douglas fir forest.

Daer Ecosection 2 (DR 2F/7C)

DR 2F/7C includes the area outside the village boundary but inside the CSA. This area includes the village water reservoir, water pump and water supply infrastructure. Douglas fir/white spruce and aspen grow on fine to moderate textured soils. This area is very important for large carnivore movement due to its location between the village and the steep slopes of Mt. Stephen.

2.2.6. Wildlife Habitat and Populations

The Montane Ecoregion is important habitat for ungulates and carnivores, providing grazing/browsing opportunities. Field is situated 13 km west of Kicking Horse Pass; one of the few low passes through the continental divide. The Kicking Horse river valley is narrow with steep valley walls. Wildlife moving east and west of the divide must negotiate a pinch point at Field where the valley floor is only 600m wide. Facilitating movement in and around the village is very important to large carnivores and ungulates.

Large carnivores such as wolverine, wolves, lynx, black bear and grizzly use the Kicking Horse valley to travel between areas of good habitat. A small but consistent resident elk population utilizes the Field area. The Montane Ecoregion is also productive for small carnivores, small mammals and has medium importance for breeding birds. Mountain goats are commonly seen high on the nearby slopes of Mt. Dennis and Mt. Burgess. Moose can be common in the Amiskwi and Emerald drainages. Recent reductions in the Field village boundary will improve the integrity of the south wildlife corridor.

2.2.7. Heritage Resources

The primary heritage resources in Field are historical buildings and sites of archaeological potential.

A Built Heritage Resource Description and Analysis (BHRDA) report for Field was prepared by Parks Canada in 1997. Based on the following criteria, the BHRDA identifies 7 buildings and a water tower at high priority status and 28 buildings as supporting structures.

- ⌘ Historical associations – thematic, person/event and local development
- ⌘ Architecture – aesthetic, functional, craftsmanship/materials and designer
- ⌘ Environment – site, setting and landmark

Potential archaeological sites are associated with the history of the CPR and are located in the railway activity area.

The Field Community Plan details guiding principles for protecting the cultural value of heritage buildings and structures, and potential archaeological sites.

2.2.8. Socio-economics

Increasing pressures from outside the Field community include:

- ⌘ Controlled residential growth in Lake Louise,
- ⌘ Increasing number of park visitors and
- ⌘ Residents' desire for educational and recreational facilities

Over the past decade, Field's population has fluctuated due changes in mining, forestry, railway, tourism and parks. The present population is approximately 300. Future increases in residency and tourism facilities will increase the pressure on water and wastewater treatment facilities and village power and road infrastructure.

Under CEAA, only those socio-economic effects that result directly from environmental effects need to be addressed in environmental assessment. In Field, for example, if poor water quality began to affect fishing and consequently tourism, the socio-economic effects of poor water quality would need to be considered. To date this is not the case, therefore socio-economic issues are not specifically addressed further in the MCSR.

2.2.9. Aesthetics

Negative visual and or auditory impacts are caused in Field by CPR activity and reduced

air quality (wood smoke, idling locomotives and Trans Canada highway traffic). These impacts may affect mountain viewsapes and the wilderness experience that visitors and residents expect to find in Field.

Tables 2.1. Environmental sensitivities of the land use districts within Field.

Land Use	Environmental Description (ecosite)	Sensitivities
<p>## Residential Central Field and upper Field</p> <p>West end of Field</p> <p>Lower Field (Burgess Ave.)</p>	<p>Fireside Ecosession FR 3/5</p> <p>Dry Gulch Ecosession DG 5/7</p> <p>Hillsdale Ecosession HD 6/3</p>	<p>## Fine to medium textured fluvial deposits.</p> <p>## Large boulders or shallow soil over bedrock; may require blasting for foundation excavation.</p> <p>## Slopes ranging from 0-45%; removal of vegetation may cause erosion.</p> <p>## Manipulation of a steeper slopes may cause slumping and small debris flows.</p> <p>## Adjacent to village boundary. Proximity to town boundary and natural areas that are designated as wildlife corridors.</p> <p>## Moderately steep slopes with well-drained soils. Removal of vegetation may cause erosion.</p> <p>## High importance for wildlife. Located at the west end of the village boundary and adjacent to a wildlife corridor.</p> <p>## Random fluvial deposits with silts and clays.</p> <p>## Slopes 1-15%</p> <p>## Separated from Kicking Horse River flats by entrance road and CPR (approx. 100m); potential for flooding.</p>
<p>## Commercial Central Field</p> <p>Field Entrance (Gas Station)</p>	<p>Fireside Ecosession FR 3/5</p> <p>Hillsdale Ecosession HD 6/3</p>	<p>## Fine to medium textured fluvial deposits.</p> <p>## Slopes 0-30%; removal of vegetation may cause erosion.</p> <p>## Ecosite rated as high wildlife diversity.</p> <p>## Large boulders or shallow soil over bedrock; may require blasting for foundation excavation.</p> <p>## Random fluvial deposits with silts and clays.</p> <p>## Slopes 1-15%</p> <p>## Located on banks of Kicking Horse River; potential for flooding.</p>
<p>## Institutional Central Field</p> <p>Field Entrance (Information Centre)</p>	<p>Fireside Ecosession FR 3/5</p> <p>Hillsdale Ecosession HD 6/3</p>	<p>## Fine to medium textured fluvial deposits.</p> <p>## Slopes 0-30%; removal of vegetation may cause erosion.</p> <p>## Ecosite rated as high wildlife diversity.</p> <p>## Large boulders or shallow soil over bedrock; may require blasting for foundation excavation.</p> <p>## Random fluvial deposits with silts and clays.</p> <p>## Slopes 1-15%</p> <p>## Located on banks of Kicking Horse River; potential for flooding.</p>
<p>## Railway and Utilities</p>	<p>Hillsdale Ecosession HD 6/3</p>	<p>## Random fluvial deposits with silts and clays.</p> <p>## Slopes 1-15%</p> <p>## Located on banks of Kicking Horse River; potential for flooding.</p>

Land Use	Environmental Description (ecosite)	Sensitivities
€# Green Space	Small buffer areas; undeveloped land that covers all ecosites.	€# Potential sensitivities may include ecosites importance to wildlife and habitat diversity.
€# Outside the Village of Field	Daer Ecosession DR 2F/7C	€# Random fluvial deposits and silty loam. €# Large boulders and shallow soil over bedrock; may require blasting for foundation excavation. €# Slopes ranging from 5-45 degrees; removal of vegetation may cause erosion €# Manipulation of slope may cause slumping and small debris flows. €# Adjacent to village boundary. Area is designated as a wildlife corridor.
	Dry Gulch Ecosession (DG5/7)	€# High importance for wildlife. Located at the west end of the village boundary and adjacent to a wildlife corridor.

Tables 2.2. The environmental sensitivities of ecosites within Field and development status.

Ecosession/ Ecosite	Service/Utility Facilities Present	Development Status	Sensitivities
Fireside FR 3/5	€# All underground and aboveground services.	€# Mostly developed with some undisturbed lots. Includes paved and unpaved roads accessing residential and commercial lots. €# Borders village boundary to the south and west.	€# Includes natural areas that are important for wildlife diversity. €# Adjacent to wildlife corridor on lower slopes of Mt. Stephen and Dennis. €# Unpaved road (Second Ave.) subject to erosion during spring run-off and heavy rainfall. €# Soil Creep.
Hillsdale HD 6/3	€# Water supply pumphouse and wastewater lift station.	€# Mix of CPR infrastructure, residential, commercial and visitor services. Includes Field entrance from Trans Canada Highway and bridge across Kicking Horse River.	€# Close proximity to the Kicking Horse River, Kicking Horse River floodplain, high water table
Dry Gulch Ecosession (DG5/7)	€# 1 single family and 1 duplex dwelling with above ground power, telephone and cable €# Field	€# West end of Field (unpaved Stephen Ave.)	€# High importance for wildlife. Located at the west end of the village boundary and adjacent to a wildlife corridor.

Ecosection/ Ecosite	Service/Utility Facilities Present	Development Status	Sensitivities
	Wastewater Treatment Plant and related infrastructure tying the plant to the village.		
Daer Ecosection (DR 2F/7C)	≠# Water supply reservoir and pumphouse. Main water line from reservoir entering Field below First Ave. and Stephen Creek laneway.	≠# Two restricted access gravel surfaced roads lead to Field water supply and cemetery.	≠# High importance for wildlife. Located at the east end of the village boundary and adjacent to a wildlife corridor.

2.3. Description of Current Infrastructure in Each Project Class

2.3.1. Subclass 1 – Buildings

The following land use areas are all contained within the Field village boundary.

The **Detailed Development Control (DDC)** designation, which applies to selected sites in the commercial and institutional zones, is to strictly manage the form of development on high-profile or sensitive sites. These sites are located near the village highway entrance and the Kicking Horse River.

Residential lots are dispersed throughout the village and are categorized by single family, duplex or single family with guest/rental cabin. Residential lots vary from flat beside the CPR tracks to steep, bordering on forested village boundary. There are very few new homes (less than 10 years) in Field. Three new homes (two on Second Avenue and one on First Avenue) were constructed in 2001. Future lot releases will include undisturbed lots off Second Avenue and Stephen Avenue on the west end of Field.

Commercial lots that include commercial accommodation and retail are concentrated in Field’s downtown core (Centre Street and Kicking Horse Avenue). These lots are on the bench above the Kicking Horse River floodplain and the CPR rail yard.

Areas slated for **institutional** development, including the school, church, Parks Canada administration building and the community center, are concentrated on Kicking Horse and First Avenue. These areas are located in highly disturbed areas with no surrounding natural vegetation.

Facilities in outlying areas consist of one water supply facility accessed from the Stephen Creek laneway on the southeast edge of Field.

Railway and Utilities are grouped into one zone. CPR facilities, including the railway tracks, station and railway yard, are concentrated along the Kicking Horse River for approximately 1.5 km. Railway operations take place within 50 m of the river. All productive riparian habitat has been removed. Utility infrastructure includes all public utilities located throughout the village and the Field Wastewater Treatment Plant at the west end of Field. The treatment plant is located on the western village boundary adjacent to a forested slope and wildlife corridor.

Small areas designated as **Green Space** are generally located along Stephen Creek and the slopes above the rail yards off Stephen Avenue West. These areas are very steep and contain vegetation of the Montane Ecoregion.

2.3.2. Subclass 2 – Service Lines

Utility service lines covered in this sub-class include:

- ⌘ Water, stormwater and sanitary service provided by the village of Field;
- ⌘ Electrical power provided by BC Hydro;
- ⌘ Propane provided by Superior Propane;
- ⌘ Telephone services provided by Telus; and
- ⌘ Cable services provided by Personna Communications

Both underground and aboveground services are included. Present utility services are provided for a resident population of 300.

Underground services could include: water, stormwater, sewer, telephone, cable, electricity and propane. Electricity, telephone and cable television services are provided by aboveground lines in some older areas in the village. Street lighting is established throughout the community. Any new service line construction will be underground.

2.3.3. Subclass 3 - Roads

Roads include all named streets in the village. Roads are typically 9 to 12 m in width, surfaced with asphalt, curbed and guttered. Most residential streets have two lanes and sidewalks. Exceptions to this are parts of Second Avenue and Burgess Avenue. These roads are one lane and gravel surface without curbs, gutters or sidewalks.

There is one **Lane** in Field that parallels Stephen Creek. It is gravel surfaced and narrow to encourage pedestrian use and local traffic.

Sidewalks are typically 1-2 m in width, surfaced with cement and abut paved roads. They are dispersed throughout out Field.

There is one **boardwalk/pedestrian pathway** connecting the commercial sector with residential sector overlooking the Field CPR yard. It is 1.5 m wide and asphalt covered.

Parking lots typically accommodate less than 75 stalls and have an asphalt or gravel surface. The largest parking lots are located near the entrance of Field at the Yoho Brothers gas station and the Parks Canada information centre.

All of these roadways, lanes, sidewalks, boardwalks, parking lots and bridges are included in the sub-class.

Roads servicing the outlying facilities include the cemetery road and the water pumphouse road. These roads are not officially named but both are referred to as the “cemetery roads”. Both roads leave Field from the Stephen Creek Bridge. They are restricted in access, but are open for pedestrian traffic. The roads are one lane and gravel surfaced.

In winter, icy roads are maintained using liquid MgCl, rock salt and abrasives. No dust control occurs in summer.

2.3.4. Subclass 4 – Trails, Parks and Recreation Grounds

There are no **trails** presently located within the CSA, although the trailhead for Mt. Stephen is located on the southeast boundary of the CSA.

Parks, and recreation grounds located within the town boundary include:

- ⌘ Field Information Centre playground, ball diamonds and soccer field.
- ⌘ Outdoor hockey rink.
- ⌘ School playground.
- ⌘ Centre St. parkette
- ⌘ Minor horticulture (weed control and pruning) at various sites.
- ⌘ Garbage and recycling bins.

The Field cemetery is the only park, or recreational facility located outside the village boundary.

2.4. Cumulative Effects

2.4.1. Inside the Field Village Boundary

Cumulative Effects Assessment (CEA) for individual projects within the community of Field (which are screened under the MCSR) will be based on the Field Community Plan. The community plan identifies potential future projects and limits to the growth that may occur in the community of Field. An environmental assessment, including a cumulative effects assessment was conducted on this plan which identified the potential for cumulative effects on: air quality; sewage processing capacity; wildlife movement; and wildlife-human conflicts. After considering the proposed mitigation and growth, the environmental assessment concluded that the cumulative effects were not significant and this conclusion is still considered valid today. Therefore, it is reasonable to assume that future projects that conform to the Field Community Plan will be unlikely to result in significant cumulative environmental effects and therefore do not require individual CEA.

If the Field Community Plan changes, and permitted densities of development or areas of commercial development increase, a new CEA will be undertaken. Individual projects that conform to the new community plan will not require CEA in CSPA forms. If a project falls outside of the class screening, an individual CEA will be required.

2.4.2. Inside the CSA, but outside Field Village Boundary

In a similar way, CEA will not be necessary for projects that are consistent with the Yoho National Park of Canada Management Plan. This plan has undergone an environmental assessment, including cumulative effects assessment. The environmental assessment concluded that the cumulative effects were not significant and this conclusion is still considered valid today. As long as renovations at the sites conform to these plans, CEA will not be necessary. Projects not covered by the MCSR will require individual environmental assessments, including cumulative effects assessments.

2.5. References

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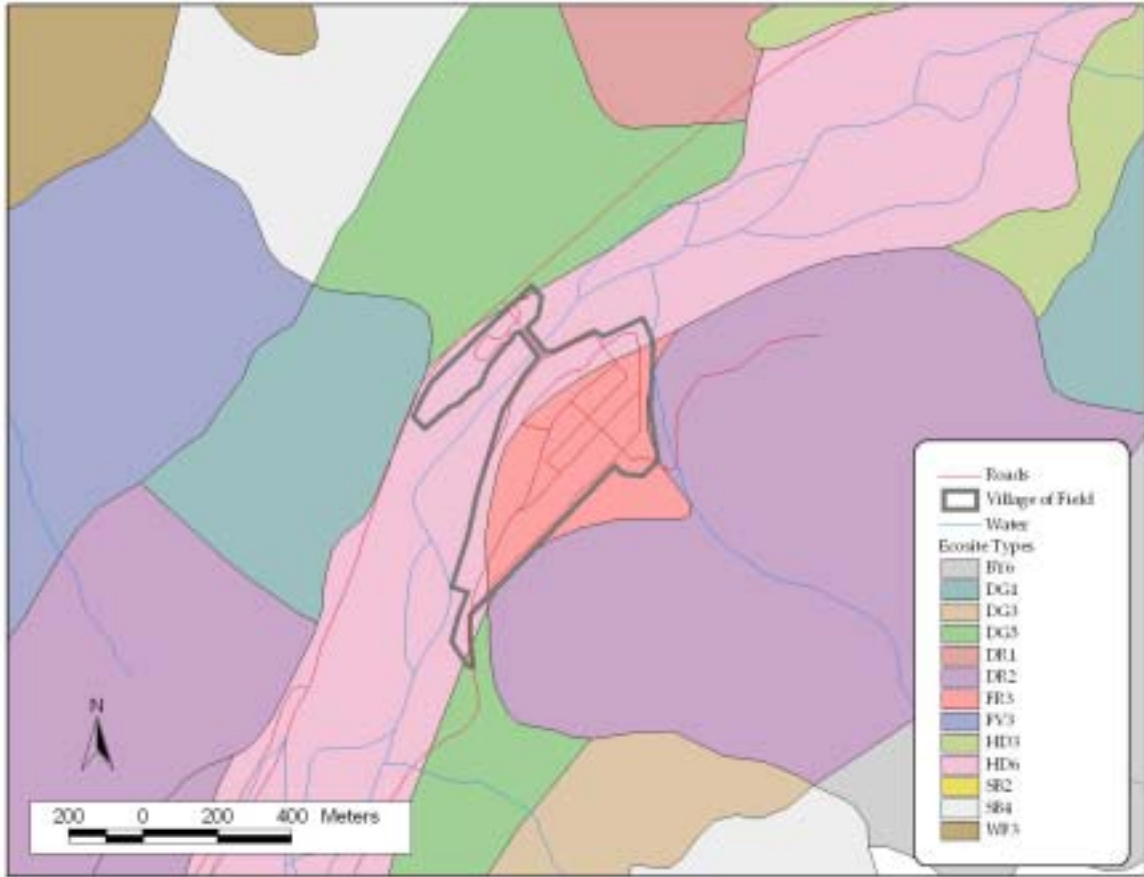


Figure 2.1 Ecosites in the Village of Field.

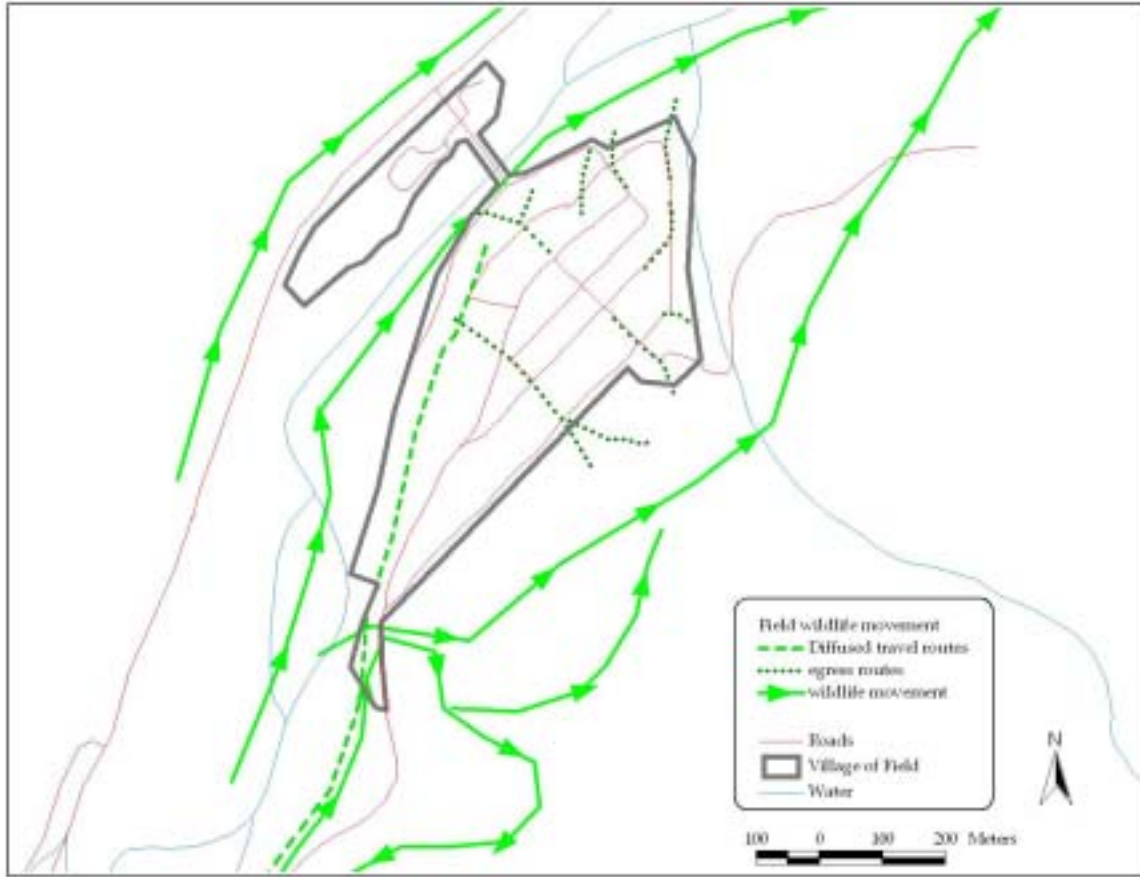


Figure 2.2 Wildlife movement corridors in and around the Village of Field.

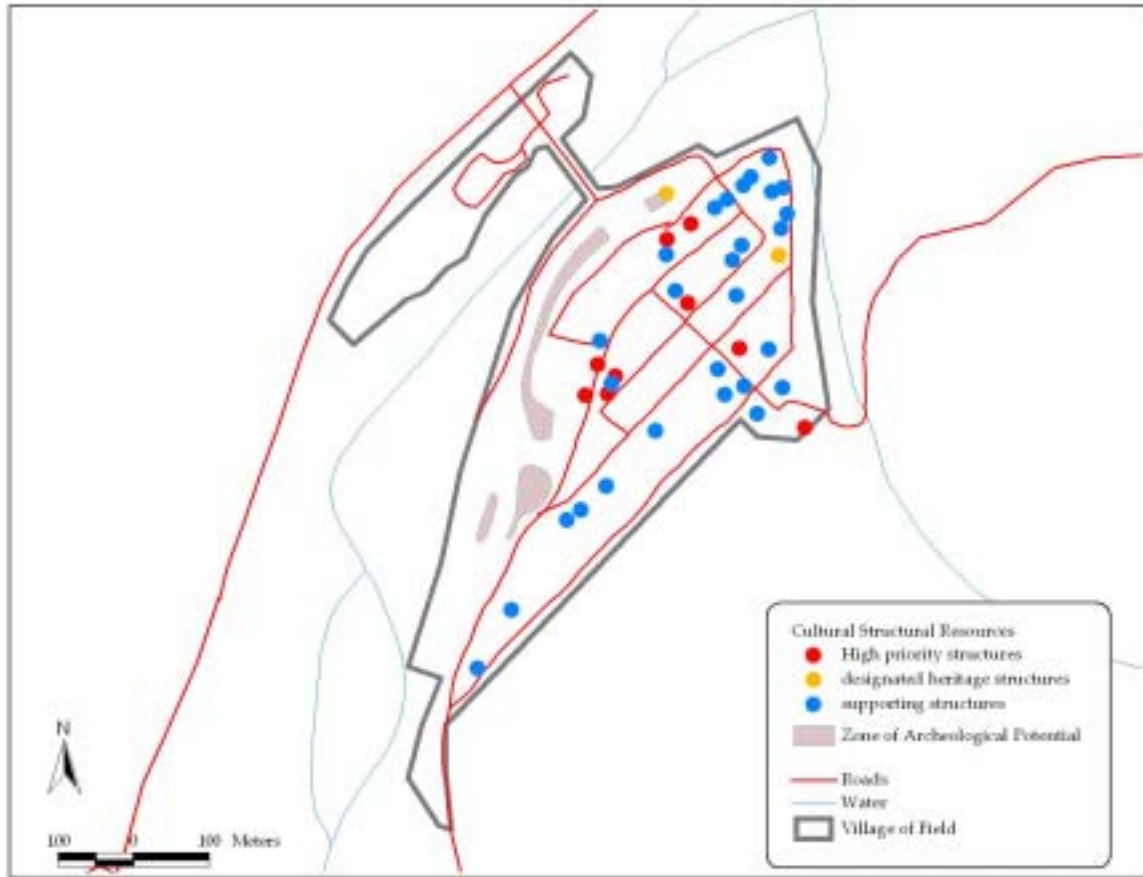


Figure 2.3 Cultural Resources in and around the village of Field.

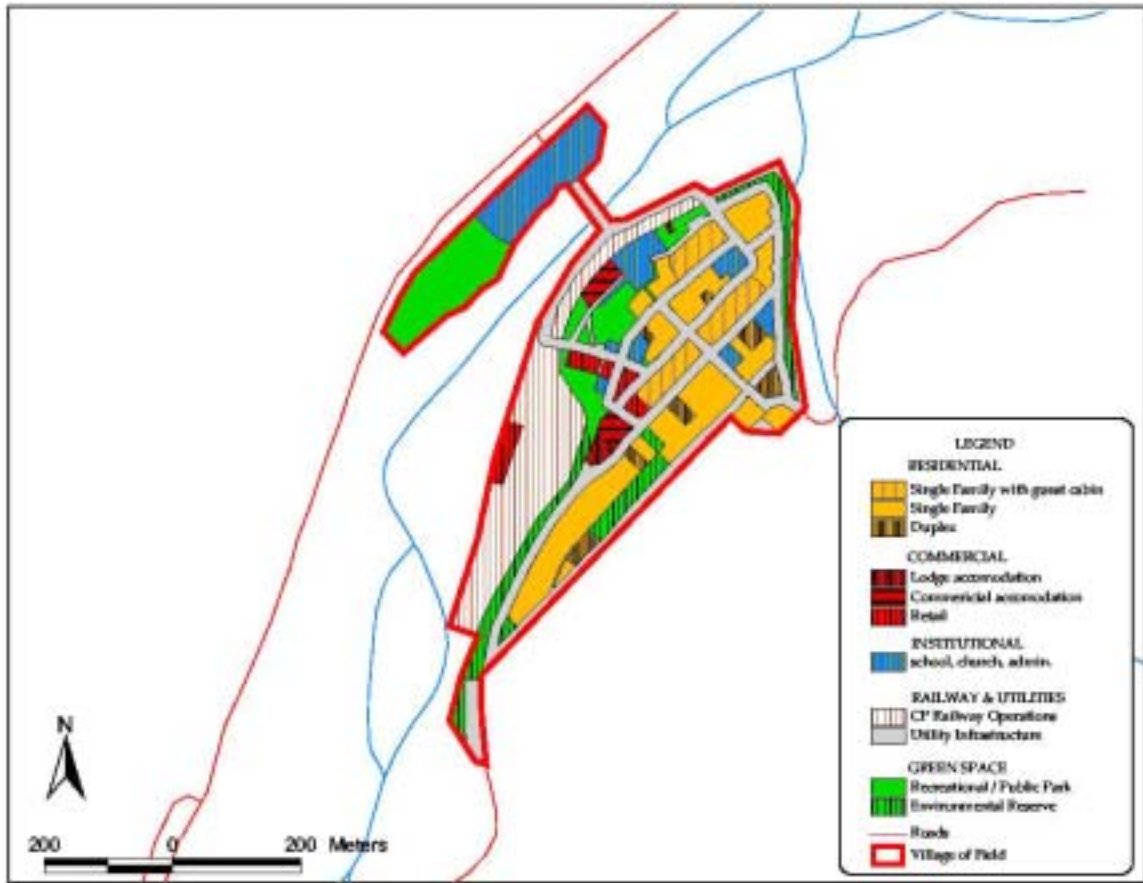


Figure 2.4 Land use categories in the Village of Field.

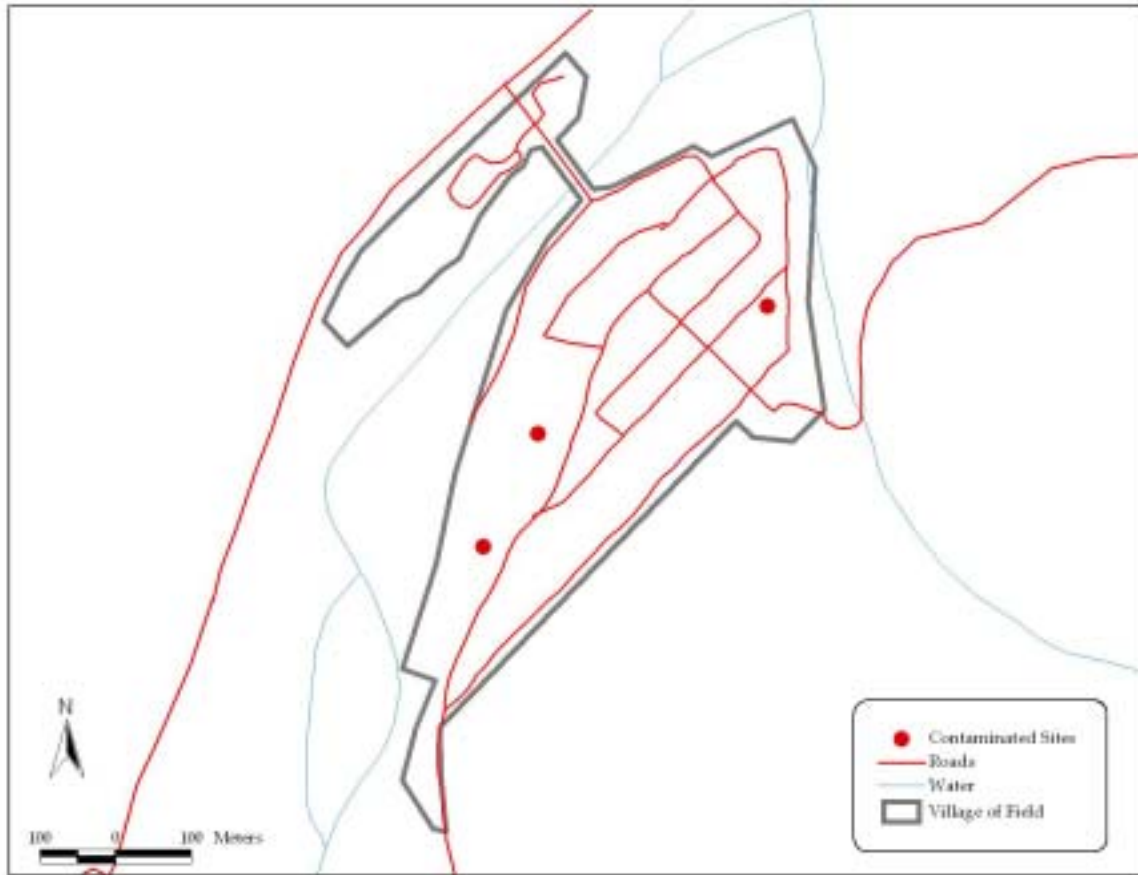


Figure 2.5 Contaminated sites in the Village of Field.

3. Jasper, Jasper National Park of Canada

3.1. Spatial Boundaries of the Class Screening Area

The Model Class Screening for Routine Projects in Jasper includes projects that occur within the community boundary as defined in the Jasper Community Land Use Plan. In addition, the following proximate outlying areas will be included in the class screening: Pine Bungalows, Tekarra Lodge, Alpine Village, Whistler's Campground, Wapiti Campground, Jasper House Bungalows, Becker's Roaring River Chalets, Patricia Lake Bungalows, Pyramid Riding Stables, Pyramid Lake Resort, Jasper Park Lodge, Jasper Cemetery, Lake Edith Resort Subdivision and Wastewater Treatment Plant.

The above areas will be considered part of the Class Screening Area (CSA). Only routine projects within the CSA are covered by the MCSR.

3.2. Environmental Description

The town of Jasper is located in Jasper National Park of Canada with a permanent resident population of approximately 4700. The town's elevation is approximately 1060m ASL and is situated within the confluence of the Athabasca, Miette, and Maligne Valleys (known as the three valley confluence – 3VC). Jasper National Park provides visitor services to nearly two million people each year and the town of Jasper accommodates up to 20 000 people on any given day throughout the summer. The regional environmental setting will be described followed by a more detailed description of the local setting. Table 3.1 and 3.2 summarize the environmental sensitivities of the ecosites and land use districts.

3.2.1. Regional Setting

The Ecological Land Classification (Holland et al 1982) details landform and soil, vegetation and wildlife information, with increasing levels of detail progressing from ecoregion, to ecosection to ecosite. Ecoregions are based primarily on vegetation, which reflects microclimate, and are divided into ecosections that are based on broad landform, drainage and soil characteristics. Ecosections are further divided into ecosites, which are based on specific soil and vegetation differences. Ecosites found in the CSA are shown in Figure 3.2.

The Montane Ecoregion is found at lower elevations in Jasper and is characterized by vegetation types dominated by:

- €# Douglas fir, lodgepole pine, white spruce
- €# Aspen, and
- €# Grasslands on drier sites.

The Montane Ecoregion occurs in the valley bottom from the east boundary along the Athabasca Valley to the west boundary along the Miette Valley, approximately 78 km. Highway 16 and the CN Rail are the main traffic routes that run through this area of montane. The montane ecoregion extends further south along the Athabasca Valley for

approximately 45 km. Highway 93 is the main travel route through this area of montane. Douglas fir and lodgepole pine forests, inter mixed with aspen, dominate the area around the Jasper townsite. The Athabasca River lies to the east of the town and flows northeast through the Athabasca Valley.

The Subalpine Ecoregion, which occurs at elevations above the Montane, is cooler and moister, and is divided into Lower and Upper Subalpine. The dominant vegetation in the Lower Subalpine is closed coniferous forest, with mature forests dominated by Englemann spruce and Subalpine fir. The Upper Subalpine vegetation is transitional between Lower Subalpine closed forest and the treeless Alpine tundra, with open forests and stunted tree growth.

3.2.2. Air Quality

Changes in air quality within the town have not been monitored. Train locomotives in the CN yard, traffic on the Yellowhead Highway (Hwy 16), ATCO power plant exhaust, and campfire smoke from Whistler and Wapiti Campgrounds have contributed to deterioration in air quality. While occasionally some people may be affected in a few locations, current levels of air pollution do not appear to pose a threat to ecological integrity.

3.2.3. Hydrology, Water Quality and Aquatic Resources

The Athabasca River, a Canadian Heritage River, lies to the east of the town and flows northeast through the Athabasca Valley. Two creeks flow through the town of Jasper: Cabin Creek and Cottonwood Creek. Cabin Creek originates at Cabin Lake above the town and flows through the west end of the town to the Miette River. Cottonwood Creek's headwaters are above the town on Pyramid Bench. The creek flows east through the town to the Athabasca River.

The new Jasper Wastewater Treatment Plant discharges treated effluent into the Athabasca River. The effluent quality from the new plant is highly improved from the inadequate lagoon system previously used. Storm water indirectly flows from the east end of the town into Cottonwood Creek. This causes sediment loading of the creek during spring run-off and heavy rainfalls in the summer.

Native fish species within the Athabasca River include Bull Trout, Rainbow Trout, Mountain Whitefish, Lake Whitefish, Northern Pike, Burbot, Longnose Sucker, Spoonhead Sculpin, and Lake Chub. Non-native species are Eastern Brook Trout and Rainbow Trout. The Rainbow Trout in the Athabasca River may be the result of inter-breeding between native and planted stock.

3.2.4. Landforms and Soils

The Jasper townsite is located entirely within the AT1 ecosite. Landforms in AT1 ecosite occur on terraces of glaciofluvial material (B material). Soils are well-drained orthic and eluviated eutric brunisols.

3.2.5 Vegetation

Forests are predominately coniferous inter-mixed with aspen stands. Douglas fir, lodgepole pine and aspen are dominant tree species around Jasper townsite. White spruce and balsam poplar are found in more hydric sites. The majority of the land within the townsite is developed, however the area between Hwy 16 and the CN tracks, known as Sleepy Hollow is undisturbed.

The ecosites in the CSA and their environmental characteristics are described in Table 3.2 and shown in Figure 3.2. Figure 3.3 indicates the locations of parks and parkettes.

Athabasca Ecosite 1 (AT1) and 3 (AT3)

The AT1 ecosite occurs on terraces of glaciofluvial material with slopes between 1% to 15%. Lodgepole pine forests dominate the vegetation types. The Jasper townsite lies entirely within the AT1 ecosite. This is largely a residential and commercial area, the majority of which has been developed.

AT3 is found on the Northwest side of Lake Edith Cottage area. The AT3 ecosite occurs on terraces of glaciofluvial material with slopes 0 to 5%. Grasslands with junegrass, pasture sage, and wild blue flax dominate with some mix of lodgepole pine, juniper, and bearberry forest type.

Patricia Ecosite 4 (PT4)

The PT4 ecosite is common to benchlands and have well drained soils with slopes from 5 to 30%. The dominant vegetation is aspen, hairy wild rye and peavine forests intermixed with lodgepole pine and buffaloberry. Some Douglas fir is present. PT4 is found on the Pyramid bench including Patricia Lake Resort, Pyramid Lake Resort, and Pyramid Riding Stables.

Hillsdale Ecosite 1 (HD1) and 4 (HD4)

HD1 is found in the Whistler's Campground and Becker's Chalet area. Landforms are linear slopes on fluvial fans or aprons, with slopes from 1 to 15%. Aspen forests are typical with portions of balsam poplar and buffaloberry.

HD4 is located at the north end of the Lake Edith Cottage area and consists of fluvial material within fan and apron landforms, with slopes of 1 to 15%. Dry grassland is the main vegetation type with a lesser amount of lodgepole pine, juniper and bearberry mix.

Fireside Ecosite 1 (1)

The FR1 ecosite consists of fluvial material on fans or aprons with slopes from 2 to 30%. Lodgepole pine forests with a buffaloberry, showy aster and twinflower understory is dominant. FR1 is found at the Northeast end of the Lake Edith Cottage area and around the Maligne Horse Range.

Public Service and Institutional Districts, including Railway Lands and the Jasper Train Station, are scattered throughout the Town, as are areas of **Parkland**.

Environmental Protection Districts are located on the periphery of the Town, are largely undeveloped and provide buffers between the developed area of the Town and the undeveloped area of Jasper National Park.

Outlying Commercial Accommodations (OCA) include Pine Bungalows, Tekarra Lodge, Alpine Village, Whistler's Campground, Wapiti Campground, Jasper House Bungalows, Becker's Roaring River Chalets, Patricia Lake Bungalows, Pyramid Lake Resort, Jasper Cemetery and Jasper Park Lodge. They are all located in close proximity to the Town (Figure 3.1).

3.2.6 Wildlife Habitat and Populations

The Montane Ecoregion is important habitat for ungulates and carnivores, providing grazing/browsing and hunting opportunities. The 3VC is a vital wildlife movement corridor and has several pinch points, which funnel wildlife movement in and through the area (Figure 3.6). Facilitating movement within the 3VC is very important to large carnivores and ungulates.

Large carnivores such as wolves, black bears and grizzlies use the 3VC to hunt, forage and travel between areas. Wolves hunt the resident elk population near the vicinity of the town during the winter. The Montane Ecoregion is also productive for small carnivores, small mammals and has medium importance for breeding birds.

3.2.7 Heritage Resources

The primary heritage resources in the Jasper CSA are historical buildings and archaeological sites. Archaeological sites in the Town of Jasper and in the OCA area are found in Figures 3.3 and 3.4.

A Built Heritage Resource Description and Analysis (BHRDA) report for Jasper was prepared by Parks Canada in 1992. The BHRDA uses the following criteria to identify and evaluate buildings:

- ⌘ Historical associations – thematic, person/event and local development
- ⌘ Architecture – design, craftsmanship/materials and builder/architect
- ⌘ Environment – historical integrity, setting and landmark

Jasper has 135 BHRDA listed heritage buildings, of which, 30 are *A* listed, 49 are *B* listed, and 56 are *C* listed. *A* listed buildings have a major significance and importance; *B* listed buildings are illustrative of building phases within the town; and *C* listed buildings are of value to the townsite environment.

One of the strategic goals of the Jasper Park Management Plan (2000) is to ensure the commemorative integrity of national historic sites. Within the town the Jasper Information Centre is a national historic site. In addition, the Jasper Community Land

Use Plan (2001) identifies eight key actions for protecting Jasper's cultural resources.

3.2.8 Socio-economics

Increasing pressures from inside or outside the Jasper community include:

- ⊘ Controlled residential and commercial growth in the town,
- ⊘ Increasing number of park visitors,
- ⊘ The Canadian National Railway and Yellowhead Highway pass through the park
- ⊘ Logging, oil and gas exploration and coal mining fragment the regional habitat.

Jasper has a year round resident population of 4,700. Visitors to Jasper National Park have increased approximately three percent annually since the early 1970's, with an estimated 1.4 million visiting or passing through the park each year. Vehicle traffic on the Yellowhead Highway has increased about three percent annually. Trains using the CNR number approximately 30-35 each day. Future increases in residency and tourism facilities will increase the pressure on water supply, electrical and natural gas supply, and road infrastructure.

Under CEAA, only those socio-economic effects that result directly from environmental effects need to be addressed in environmental assessment. To date this is not the case, therefore socio-economic issues are not specifically addressed further in the MCSR.

3.2.9 Aesthetics

Negative visual and/or auditory impacts in Jasper are caused by the CNR, Yellowhead Highway traffic, increasing number of visitors, traffic congestion within the town during peak summer periods and reduced air quality (trains, vehicles, and campfires). These impacts may affect mountain views and the wilderness experience that visitors and residents expect to find in Jasper.

Table 3.1 Summary of Land Use Districts and Environmental Descriptions.

Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)	
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)		
Commercial (C)										
Commercial District C1	Permitted Uses: - apartment housing - retail stores - professional, financial, and office support max. FAR ^(c) = 2.25 max. SiteCov = 90% max. height = 9 m	Athabasca Ecosite 1 Fully Developed $\frac{ATI}{3}$	Lodgepole pine, juniper, bearberry.	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM ^(d) texture = glaciofluvial coarse	A	A	A	A	A	
Tourist Commercial District C2	Permitted Uses: - hotels - motels max. FAR = 1 max. SiteCov = 40% max. height = 9 m	Athabasca Ecosite 1 Partly Developed; includes natural forest; bordered by high density housing to the N, S, and W. $\frac{ATI}{3}$	Lodgepole pine, juniper, bearberry.	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	M- H ^(e)	VH- H ^(f)	H	H	H	the ecosite is rated as highly important to wildlife, and may include wet areas important for reptiles and amphibians;

Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Tourist Commercial Town Centre District C3	Permitted Uses: - hotels - motels max. FAR =1 max. SiteCov = 40% max. height = 9 m	Athabasca Ecosite 1 Partly Developed; includes natural forest; bordered by high density housing to the N, S, and W.	Lodgepole pine, juniper, bearberry.	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaci-fluvial coarse	M- H ^(e)	VH- H ^(f)	H	H	the ecosite is rated as highly important to wildlife, and may include wet areas important for reptiles and amphibians;
Automobile Service Station District C4	Permitted Uses: - automobile service stations max. FAR =1 max. SiteCov = 40% max. height = 9 m	Athabasca Ecosite 1 Partly Developed; includes natural forest; bordered by high density housing to the N, S, and W.	Lodgepole pine, juniper, bearberry.	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaci-fluvial coarse	M- H ^(e)	VH- H ^(f)	H	H	the ecosite is rated as highly important to wildlife, and may include wet areas important for reptiles and amphibians;
Hostel District C5	Permitted Uses: - hostel - staff accommodation max. FAR =1 max. SiteCov = 40% max. height = 9 m	Athabasca Ecosite 1 Partly Developed; includes natural forest; bordered by high density housing to the N, S, and W.	Lodgepole pine, juniper, bearberry.	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaci-fluvial coarse	M- H ^(e)	VH- H ^(f)	H	H	the ecosite is rated as highly important to wildlife, and may include wet areas important for reptiles and amphibians;

Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)	
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Birds ^(a)		
Storage and Services District (Block S)	Permitted Uses: - utility services - veterinary services - warehouses	Athabasca Ecosite 1 ATI 3 Largely developed; Surrounded by natural lands bordering the Town boundary, including a wildlife corridor to the north, and Parkland. Also borders small Environmental Protection block.	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	A	A	A	A		
Public Open Space O	Permitted Uses: - public parks - outdoor recreational - playgrounds	Athabasca Ecosite 1 ATI 3 Fully Developed; commercial core, surrounded by other commercial and public service districts	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	A	A	A	A	high water table	
Residential										
One-Unit Dwelling District R1	Permitted Uses: - one-unit dwellings - garages when ancillary to a one-unit dwelling - one accessory building 4.5m ² or less max. SiteCov = 30% max. height = 9 m	Athabasca Ecosite 1 ATI 3 Largely Developed; Surrounded mainly by Parkland and natural lands bordering the Town boundary.	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	A	A	A	A	adjacency to environmental protection lands and forested lands with an ecosite ranking as highly important to wildlife. erosion and vegetation reclamation concerns on southerly aspects.	

Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Two-Unit Dwelling District R2	<p>Permitted Uses:</p> <ul style="list-style-type: none"> - one-unit dwelling - two-unit dwelling - garages when ancillary to a on-unit or a two-unit dwelling - one accessory building 4.5m² or less per unit <p style="text-align: right;">max. SiteCov = 35% max. height = 9 m</p>	<p>Athabasca Ecosite 1</p> <p>Partly developed; Surrounded mainly by Parkland and natural lands bordering the Town boundary.</p>	<p>Lodgepole pine, juniper, bearberry</p>	<p>slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse</p>	<p>H- M^(e)</p>	<p>H</p>	<p>H</p>	<p>H- VH</p>	<p>seasonally high water table; poor drainage; soil may be susceptible to ponding and compaction; adjacent to and includes natural areas including Parkland that are ranked as highly important to wildlife; possibly includes wet areas important for reptiles and amphibians</p>

Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Old Town Jasper Historic District R2H	Permitted Uses: - one-unit dwelling - two-unit dwelling - garages when ancillary to a on-unit or a two-unit dwelling - one accessory building 4.5m ² or less per unit max. SiteCov = 35% max. height = 9 m	Athabasca Ecosite 1 Partly developed; Surrounded mainly by Parkland and natural lands bordering the Town boundary.	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	H- M ^(e)	H	H	H- VH	seasonally high water table; poor drainage; soil may be susceptible to ponding and compaction; adjacent to and includes natural areas including Parkland that are ranked as highly important to wildlife; possibly includes wet areas important for reptiles and amphibians

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Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Multi –Unit Small Lot Dwelling District R3a	Permitted Uses: - one-unit dwellings - two-unit dwellings - multi-unit dwellings - one accessory building containing 4.5m ² or less per residential unit - garages when ancillary to a residential development max. SiteCov = 40% max. height = 13.7 m	Athabasca Ecosite 1 Largely developed; Surrounded by natural lands bordering the Town boundary, including a wildlife corridor to the north, and Parkland. Also borders small Environmental Protection block.	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	A	A	A	A	includes small areas of, and is adjacent to natural areas, including Parkland and Environmental Protection, that are ranked as highly important to wildlife; also, wildlife corridor. may have high water table.
Multi –Unit Dwelling District R3b	Permitted Uses: - apartments - row houses - garages when ancillary to a dwelling development - one accessory building containing 4.5m ² or less per residential unit max. SiteCov = 40% max. height = 13.7 m	Athabasca Ecosite 1 Largely developed; Surrounded by natural lands bordering the Town boundary, including a wildlife corridor to the north, and Parkland. Also borders small Environmental Protection block.	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	A	A	A	A	includes small areas of, and is adjacent to natural areas, including Parkland and Environmental Protection, that are ranked as highly important to wildlife; also, wildlife corridor. may have high water table.

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Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Compact Lot District R4	Permitted Uses: - manufactured homes - carports - accessory buildings	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	H	H	H	H- VH	
Cabin Creek West One-Unit Dwelling District CCW _a	Permitted Uses: - one-unit dwellings - garages attached to the primary building - accessory buildings	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	H	H	H	H- VH	

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Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Birds ^(a)	
Cabin Creek West Two-Unit Dwelling District CCWb	Permitted Uses: - two-unit dwellings - garages attached to the primary building - accessory buildings	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	H	H	H	H- VH	
Cabin Creek West Multi-Unit Dwelling District CCWc	Permitted Uses: - row-houses - garages attached to the primary building - accessory buildings	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	H	H	H	H- VH	
Institutional District I	Permitted Uses: - none Discretionary Uses: - institutional, governmental, educational, or community service nature	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	H	H	H	H- VH	

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Land Use District	Construction of Permitted Buildings	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(b)				Sensitivities ^(f)
					Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Public Services District PS	Permitted Uses: - government services - transportation services - public parking areas	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	H	H	H	H- VH	
Railyard District RY	Permitted Uses: - railway services	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	H	H	H	H- VH	
Residential Reserve RR	Permitted Uses: - reserve land for future residential development	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	H	H	H	H- VH	
Community Reserve CR	Permitted Uses: - reserve land for future non-commercial development including housing	Athabasca Ecosite 1 <u>ATI</u> 3	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = glaciofluvial coarse	H	H	H	H- VH	

^(a) A: Altered; Ecosite is largely or fully developed and all or much of the natural habitat has been removed. Wildlife may use the remaining or introduced vegetation.
^(b) H: High
VH: Very High
M: Moderate

- (b) Source: Holland and Coen, 1983. Ecological (Biophysical) Land Classification of Banff and Jasper National Parks. Vol II: Soil and Vegetation Resources.
Holroyd and Van Tighen. 1983. Ecological (Biophysical) Land Classification of Banff and Jasper National Parks. Vol. III: Wildlife Inventory.
- (c) FAR = maximum floor area ratio
- (d) SiteCov = maximum site coverage.
- (e) PM = parent material
- (f) moderate in summer, high in winter
- (g) very high in summer, high in winter
- (h) high in winter, medium in summer

Table 3.2 Summary of Outlying Areas and Environmental Descriptions.

Areas in Vicinity of the Town	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(a,b)				Sensitivities ^(f)
				Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Breeding Birds ^(a)	
Outside Town of Jasper: Highway 93 & 93a								
Tekarra Lodge	Athabasca Ecosite 1 $\frac{ATI}{3}$	Lodgepole pine, juniper, bearberry	slope = 0-5% AT1 landform = terrace soil type = eutric brunisol PM ^(c) texture = galciofluvial coarse	H ^(b)	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Close proximity to the Athabasca River. Wildlife corridor.
Alpine Village	Athabasca Ecosite 1 $\frac{ATI}{3}$	Lodgepole pine, juniper, bearberry	slope = 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = galciofluvial coarse	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Close proximity to the Athabasca River . Wildlife corridor.
Jasper House Bungalows	Athabasca Ecosite 1 $\frac{ATI}{3}$	Lodgepole pine, juniper, bearberry	slope = 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.
Wapiti Campground	Athabasca Ecosite 1 $\frac{ATI}{3c}$	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.

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Areas in Vicinity of the Town	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(a,b)				Sensitivities ^(f)
				Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Birds ^(a)	
Whistler's Campground	Athabasca Ecosite 1 <u>ATI</u> 3c	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% ATI landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.
	Hillsdale Ecosite 1 <u>HDI</u> 5	Aspen, hairy wild rye, peavine	Slope = 5-15% HDI landform = linear slopes on fans and aprons Soils = orthic and cumulic regosols PM texture = coarse stratified fluvial	H	H	H	H	HDI very important area for breeding birds.
Becker's Roaring River Chalets	Hillsdale Ecosite 1 <u>HDI</u> 5	Aspen, hairy wild rye, peavine	Slope = 5-15% HDI landform = linear slopes on fans/ aprons Soils = orthic and cumulic regosols PM texture = coarse stratified fluvial	H	H	H	H	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor. Very important area for breeding birds.
Pyramid Lake Road								
Pyramid Lake Bungalows	Patricia Ecosite 4 <u>PT4</u> 5c	Aspen, hairy wild rye, peavine	slope = complex 5-15% landform = ridged moraine over bedrock soil type = eutric brunisol/luvisol PM texture = medium	M	H	H	VH	Ecosite is ranked as highly important to carnivores and breeding birds. Wildlife corridor
	Patricia Ecosite 4 <u>PT4</u> 5c	Aspen, hairy wild rye, peavine	slope = complex 5-15% landform = ridged moraine over bedrock soil type = eutric brunisol/luvisol PM texture = medium	M	H	H	VH	Ecosite is ranked as highly important to carnivores and breeding birds. Wildlife corridor
Pyramid Lake Resort	Patricia Ecosite 4 <u>PT4</u> 5c	Aspen, hairy wild rye, peavine	slope = complex 5-15% landform = ridged moraine over bedrock soil type = eutric brunisol/luvisol PM texture = medium	M	H	H	VH	Ecosite is ranked as highly important to carnivores and breeding birds. Wildlife corridor

Model Class Screening Report for Routine Projects

Areas in Vicinity of the Town	Environmental Description (ecosite and development status) ^(b)	Vegetation Cover ^(b)	Landform — (slopes, soils) ^(b)	Ecosite's Importance to Wildlife ^(a,b)				Sensitivities ^(f)
				Ungulates ^(a)	Carnivores ^(a)	Small Mammals ^(a)	Birds ^(a)	
Maligne Lake Road Jasper Park Lodge	Athabasca Ecosite 1 <u>AT1</u> 3c	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.
Lake Edith Cottages	Athabasca Ecosite 1 <u>AT1</u> 3c Athabasca Ecosite 3 <u>AT3</u> 3 Hillsdale Ecosite 4 <u>HD4</u> 3 Fireside Ecosite 1 <u>FRI</u> 3c	Lodgepole pine, juniper, bearberry Dry grassland, lodgepole pine, juniper, bearberry Dry grassland, lodgepole pine, juniper, bearberry Lodgepole pine, buffaloberry, showy aster	slope = complex, 0-5% AT1 & AT3 landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial HD4 landform = linear slopes on fans/ aprons Soils = orthic and cumulic regosols PM texture = coarse stratified fluvial FRI landform = fan and aprons Soils = eutric brunisols PM texture = coarse stratified fluvial	H VH VH H	H H H H	H/M ^(d) H H H	M H H H	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.
Highway 16 Pine Bungalows	Athabasca Ecosite 1 <u>AT1</u> 3c	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.
Wastewater Treatment Plant	Athabasca Ecosite 1 <u>AT1</u> 3c	Lodgepole pine, juniper, bearberry	slope = complex, 0-5% AT1 landform = terrace soil type = eutric brunisol PM texture = coarse glaciofluvial	H	H	H/M ^(d)	M	Eosite is ranked highly important to ungulates and predators because of its warm temperatures and low snow accumulations. Wildlife corridor.

- (a) A: Altered: Ecosite is largely or fully developed and all or much of the natural habitat has been removed. Wildlife may use the remaining or introduced vegetation.
H: High
VH: Very High
M: Moderate
- (b) Source: Holland and Coen, 1983. Ecological (Biophysical) Land Classification of Banff and Jasper National Parks. Vol II: Soil and Vegetation Resources.
- (c) PM = parent material
Holroyd and Van Tighen. 1983. Ecological (Biophysical) Land Classification of Banff and Jasper National Parks. Vol. III: Wildlife Inventory.
- (d) High for bats, moderate for other small mammals

3.3. Description of Current Infrastructure in Each Project Class

3.3.1. Subclass 1 – Buildings

In 2002, 16 building permits were issued (3 commercial, 2 institutional and 10 residential), but there has been a moratorium in place on new building in the Town of Jasper since 1998. The moratorium should be lifted in 2003 and building permits are expected to increase by 4 to 5 times for residential alone. Approximately 17,000 square feet of new commercial space will be issued each year until the entire allocation of 100,000 square feet is used. The procedures and activities used to construct new buildings and mitigate environmental impacts are standard, and experienced contractors are hired. Contractors used by the Town of Jasper must have a Town of Jasper Business Licence. The construction of any buildings with dimensions greater than those permitted for given Districts in the Regulations will not be covered under this Class Screening, and will require a separate Environmental Screening under the *CEAA*.

On average, 1-2 permits are issued for Heritage Buildings each year. Requests for renovations to Heritage Buildings are reviewed through the development process for approval. Modifications of existing buildings are conducted according to industry standards and by experienced contractors. Modifications of Heritage Buildings owned by Parks Canada (PC) buildings are conducted by PC carpenters, under the supervision of the Federal Heritage Building Review Office. Larger projects can be contracted. Procedures similar to those used for original building construction are used for Heritage Buildings. Modifications, which do not comply with the Regulations Respecting the Use of Land in the Town of Jasper, are not covered under this Class Screening, and will require a separate Environmental Screening under the *CEAA*.

No federally or provincially recognized Heritage Buildings have been decommissioned. Decommissioning and abandonment of buildings is conducted according to industry standards and by experienced contractors.

3.3.2. Subclass 2 – Service Lines

In 2002 services associated with the Town of Jasper were geared to provide for approximately 24 800 overnight visitors, made up of 20 000 tourists in commercial accommodation and 4 800 permanent or seasonal residents in residential accommodation. Services have been designed to accommodate “peak” demand (i.e. 24 800 people) on any given day. The Wastewater Treatment Plant is designed to handle a ‘peak’ demand of 30 000 people.

Utility service lines covered in this sub-class include:

- ⌘ Water and sanitary sewer services provided by the Municipality of Jasper Corporate and Environmental Services.
- ⌘ Natural gas services provided by ATCO Gas;
- ⌘ Electric power provided by ATCO Power and ATCO Electric; and
- ⌘ Communication services provided by Telus and Shaw Cable.

Both underground and aboveground services are included. Present utility services are provided for a resident population of 4 700 and 15 000 overnight visitors.

3.3.2.1. Water Supply

Water is provided to all Town of Jasper facilities, as well as to Pine Bungalows, Tekerra Lodge and Alpine Lodge, by the Municipality of Jasper Corporate and Environmental Services Department. The water quality needs to conform to the Standards and Guidelines for Municipal Water Supply in Alberta.

The Town's system is made up of three water wells (located at the Athabasca River near Old Fort Point), pumps which provide pressure to move water to the treatment centre (total pumping capacity of 400 m³ per hour) and a reservoir on Pyramid Bench. Ductile iron pipes carry the water to the reservoir and two main lines (a 300 mm and a 350 mm) from the reservoir to town. Older distribution pipes are largely ductile iron with lead joints, a significant portion having gasketed joints (rubber seal); newer pipes are polyvinyl chloride. The reservoir has a capacity of 7000 m³.

There is approximately 31 km of water mains with sizes ranging from 100 mm to 400 mm for main lines and 19 mm to 150 mm for service/feeder lines. All water services are underground and typically run beneath roadways.

Average daily demand rate for water is approximately 4000-5000 m³/day with demand going up to 6-7000 m³/day in the summer. The water system is adequate to meet the current needs in the Town of Jasper.

3.3.2.2. Storm Water

There are 2 storm water sewer lines in the Town, one flows into a field by Hwy 16 and one into the south drainage ditch at the east end of Connaught Drive. The system has approximately 9 km of sewer leads and 2.7 km of catchbasin leads. The pipes range in diameter from 300 mm to 1200 mm. Storm water sewers typically run beneath roadways, and are installed or repaired during road construction or maintenance.

3.3.2.3. Sanitary Sewer (Waste Water Treatment)

The Town of Jasper provides wastewater treatment services, although the operation of the Wastewater Treatment Plant, located outside the Town of Jasper boundary, is contracted to Earth Tech.

Sanitary waste is collected via gravity feed from all residential and commercial areas in the Town of Jasper, as well as from Pine Bungalows, Tekera Lodge, Alpine Lodge, and Jasper Park Lodge.

The wastewater treatment entails:

- ∄# Primary treatment for the settling of solids, including screening, primary clarification, aeration with oxygen to propagate bacteria, and a secondary clarification, and
- ∄# Secondary treatment of the effluent with ultra violet radiation.

There are 24.5 km of sanitary sewer lines, which range in diameter from 200 mm to 600 mm for main lines and 100 mm to 150 mm for feeder lines. All services are underground, typically following road alignments.

3.3.2.4. Natural Gas

Natural gas services are provided to the CSA by ATCO Gas. All service lines are underground, and located separately from other service lines for safety considerations.

There is approximately 18.5 km of natural gas pipelines inside the Town boundary. There is 0.4 km of polyethylene pipes ranging in diameter from 18 to 31 mm, and 18.2 km of steel pipes, ranging in diameter from 31 to 200 mm.

The Town of Jasper uses approximately 364 680 GJ/year of natural gas.

3.3.2.5. Electricity

Jasper is not on the provincial grid system, but generates electricity from natural gas fired generators. The Astoria Generating Station, located on the Astoria River, produces electricity for the town during seasonal flows. Electrical services are provided to all facilities in the CSA by ATCO Electric with approximately 26 km of high voltage electrical lines inside the Town boundary, including both above-ground and underground lines. Where existing lines are aboveground, these are maintained, but all new and replacement services within the Town boundary are installed underground. Above-ground lines service sites along Highway 93 to the Parkway Gate, Highway 93A, and along Pyramid Road to Pyramid Lake Resort.

Primary high voltage lines of 25 kV and some 5 kV provide power to the Town, with feeder lines of lower voltage (120/240 volts for residential and 120/208 volts for commercial). ATCO Power and ATCO Electric own and maintain the aboveground poles, which they share with telephone and cable services. Underground conduits are also shared.

3.3.2.6. Telephone

Telephone services are provided by Telus. Aboveground poles and underground conduits are shared with ATCO Electric and the local cable television provider. There is approximately 6.7 km of aboveground lines and 8.2 km of underground lines.

3.3.2.7. Cable Television

Shaw Cable provides cable television services in the townsite. There is approximately 20.3 km of cable in the CSA (6.8 km of ¾ inch and 13.5 km of ½ diameter cable wire). In areas where Telus and ATCO Electric provide above ground services, Shaw shares the poles for their coaxial cables. Cable laid underground within polyvinyl chloride (PVC) pipe is also shared with Telus and ATCO Electric.

3.3.3. Subclass 3 - Roads

In 2000, the Town of Jasper maintained approximately:

- €# 17 km of existing roads,
- €# 6 km of lanes (alleys),
- €# 22 km of sidewalks, and
- €# 9 Town of Jasper owned parking lots (all less than 75 stalls).

Roads are classified as major arterial (Connaught Drive), collector, and residential depending on the level of use. Roads are typically 9 to 12 m in width, surfaced with asphalt, curbed, guttered, and have sidewalks. They are within a right-of-way, which varies between 18 to 20 m in width. The majority of roads are two lanes wide, with the major arterial road (Connaught Drive) having four lanes. Main roads in the Town are shown on Figure 3.3.

Lanes (alleys) are typically 4.0 to 6.0 m in width, gravel surfaced with unpaved shoulders, no curbs, gutters or sidewalks.

Sidewalks are typically 1.0 to 2.0 m in width, surfaced with asphalt or cement and abutt paved roads. They are scattered throughout the Town, principally on arterial and collector roads. Sidewalks are rarely, if ever, decommissioned in Jasper.

Boardwalks are raised sidewalks usually constructed of wood, and located in environmentally sensitive areas, often wetlands. Jasper does not have any boardwalks within the CSA.

Parking Lots typically accommodate less than 75 stalls and have an asphalt surface. Parking lots owned by the Municipality of Jasper are located in the downtown area, while privately owned parking lots are scattered throughout the Town. Parking lots are rarely, if ever, decommissioned in Jasper.

All of these roadways, sidewalks, boardwalks and parking lots are included in the sub-class.

Roads servicing the outlying facilities include:

- €# Pyramid Lake Road to Pyramid Lake Resort, 7 km,
- €# Lodge Road to Jasper Park Lodge, 2 km,
- €# Highway 93A to Tekarra and Alpine Lodges, 2 km, and
- €# Highway 93 to Becker's Chalet, 5 km.

These roads are typically paved with unpaved shoulders and have no curbs, gutters or sidewalks. The typical road width is 8 to 10 m, within a right-of-way of approximately 14 m. The modification, maintenance and repair of these roads are the responsibility of Parks Canada.

In winter, icy roads are maintained by 5% salt and sand mixture. Alleys are maintained with sand only. In the summer, CaCl is used to control dust in allies.

3.3.4. Subclass 4 – Trails and Parkettes

Parks, parkettes and recreation ground located within the Town boundary include the main Town Park, called Centennial Park, nine parkettes, as well as smaller areas, which are maintained by the Town Public Works Department. The nine parkettes, also called open spaces, listed in the Jasper Community Land Use Plan include:

- ☞ Bowling Green (Dog Park),
- ☞ Centennial Park,
- ☞ Snapes Hill,
- ☞ Cabin Creek Riparian Area,
- ☞ Stone Mountain Playground,
- ☞ Cabin Creek West Walkways and Playgrounds,
- ☞ Fireman’s Park, and
- ☞ Lion’s Park.

Parks are all located within the AT1 ecosite.

Public Service and Institutional Districts, including Railway Lands and the Jasper Train Station, are scattered throughout the Town, as are areas of **Parkland**. **Environmental Protection Districts** locate on the periphery of the Town, are largely undeveloped and provide buffers between the developed area of the Town and the undeveloped area of Jasper National Park.

Facilities in outlying areas include accommodation facilities located in close proximity to the town (Pine Bungalows, Tekarra Lodge, Alpine Village, Whistler’s Campground, Wapiti Campground, Jasper House Bungalows, Becker’s Roaring River Chalets, Patricia Lake Bungalows, Pyramid Lake Resort, Jasper Cemetery and Jasper Park Lodge - Figure 3.1).

3.4. Cumulative Effects

3.4.1. Inside the Town of Jasper

Cumulative Effects Assessment (CEA) for individual projects within the community of Jasper (which are screened under the MCSR) will be based on the Jasper Community Land Use Plan. The community plan identifies potential future projects and limits to the growth that may occur in the community of Jasper. An environmental assessment, including a cumulative effects assessment was conducted on this plan after considering the proposed mitigation and growth. The assessment found that higher residential density has the potential to increase environmental stressors within the town by removing vegetation and soils, affecting stormwater runoff and impacting wildlife species that occupy habitat in town (birds and small mammals). The assessment also found that increased recreational demands could cause displacement of wildlife.

Furthermore, since Jasper is not on the provincial grid, but rather generates electricity from natural gas fired generators; Jasper’s electrical supply has a fixed limit. With each new

development in Jasper National Park demand for total power supply is moving closer to the finite limit. The electrical buffer between supply and demand for the town of Jasper is only 1.4 MW. Each new development must strive to be energy efficient as the maximum power demand at any given time is 162 kWh. To ensure new developments do not contribute to the cumulative impact on the electrical supply and demand for the town of Jasper, developers need to continue to seek alternative energy sources wherever possible.

Nevertheless, the environmental assessment concluded that the cumulative effects were not significant and this conclusion is still considered valid today. Therefore, it is reasonable to assume that future projects that conform to the Jasper Community Land Use Plan will be unlikely to result in significant cumulative environmental effects and therefore do not require individual CEA.

If the Jasper Community Land Use Plan changes, and permitted densities of development or areas of commercial development increase, a CEA will be completed. If this is done, then cumulative effects assessments will continue not to be required for individual projects so long as they conform to the current Jasper Community Land Use Plan. If the class screening does not apply to the project, an individual CEA will be required.

3.4.2. Inside the CSA, but outside Jasper Boundary

In a similar way, CEA will not be necessary for projects that are consistent with the Jasper National Park of Canada Management Plan. To be consistent with the management plan, Outlying Commercial Accommodation leases specify the type of activity, size and density of development permitted.

This plan has undergone an environmental assessment, including cumulative effects assessment. The environmental assessment concluded that the cumulative effects were not significant and this conclusion is still considered valid today. As long as renovations at the sites conform to the Park Management Plan, CEA will not be necessary for projects covered in this MCSR. Projects not covered by the MCSR will require individual environmental assessments, including cumulative effects assessments.

3.5. References

3.5.1.1. Personal Communications

Dave Edwards – Highways Manager, JNP
Gordon Blake – Plumbing Foreman, JNP
Joe Polisuk – Townsite Services, JNP
Deryl Mastre – Water Services Supervisor, Municipality of Jasper
Richard Kocon – ATCO Electric
Shadie Radmard – ATCO Gas
Val Bernard – Shaw Cable
Wil Magnon – Telus

3.5.1.2. Other References

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Golder Associates. 1999. Strategic Environmental Assessment for the Jasper Community Plan.

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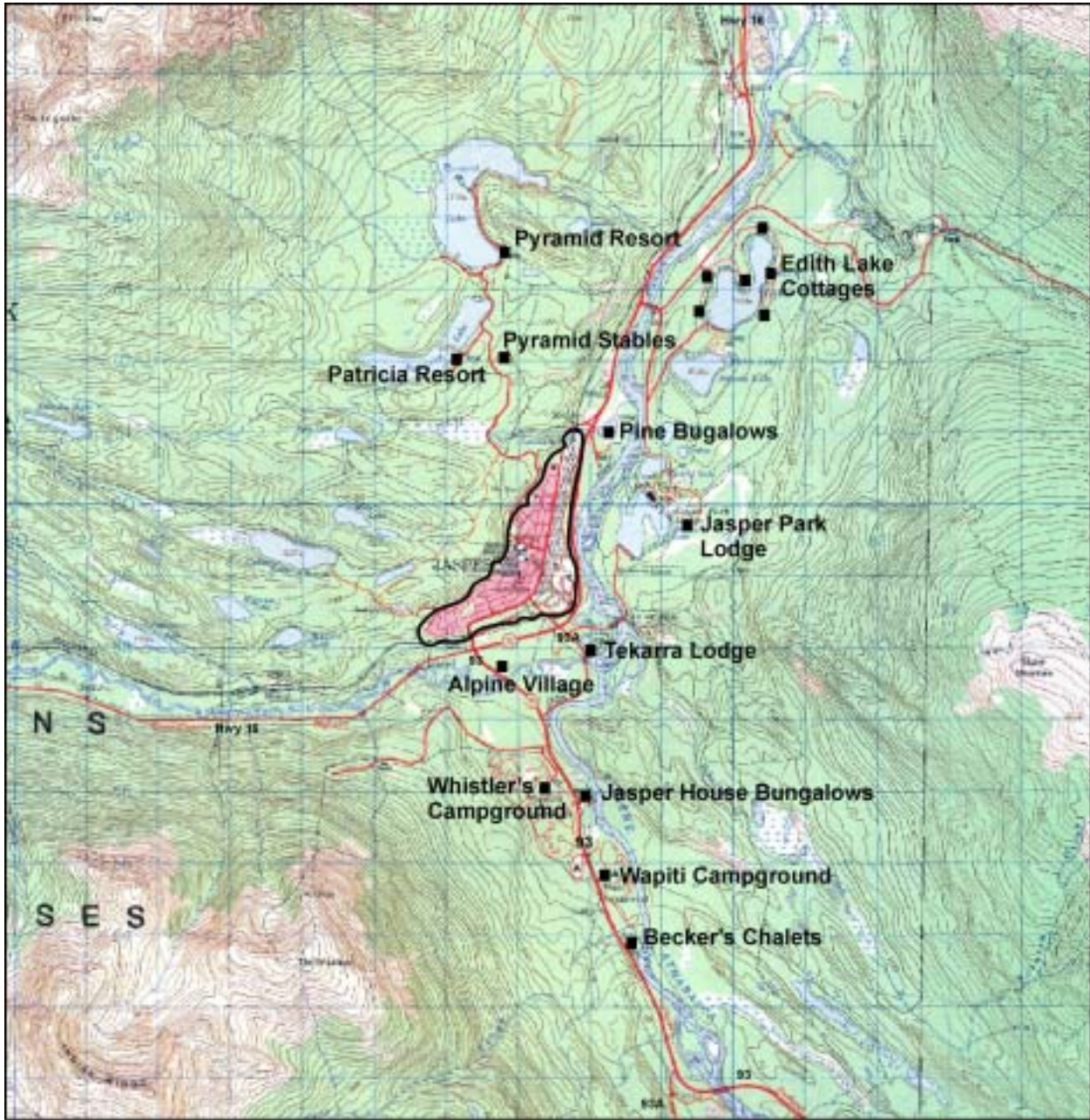
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-  Town Boundary
-  Outlying Areas in the Class Screening Area



Figure 3.1 Jasper Town Boundary and Outlying Areas included in the Class Screening Area

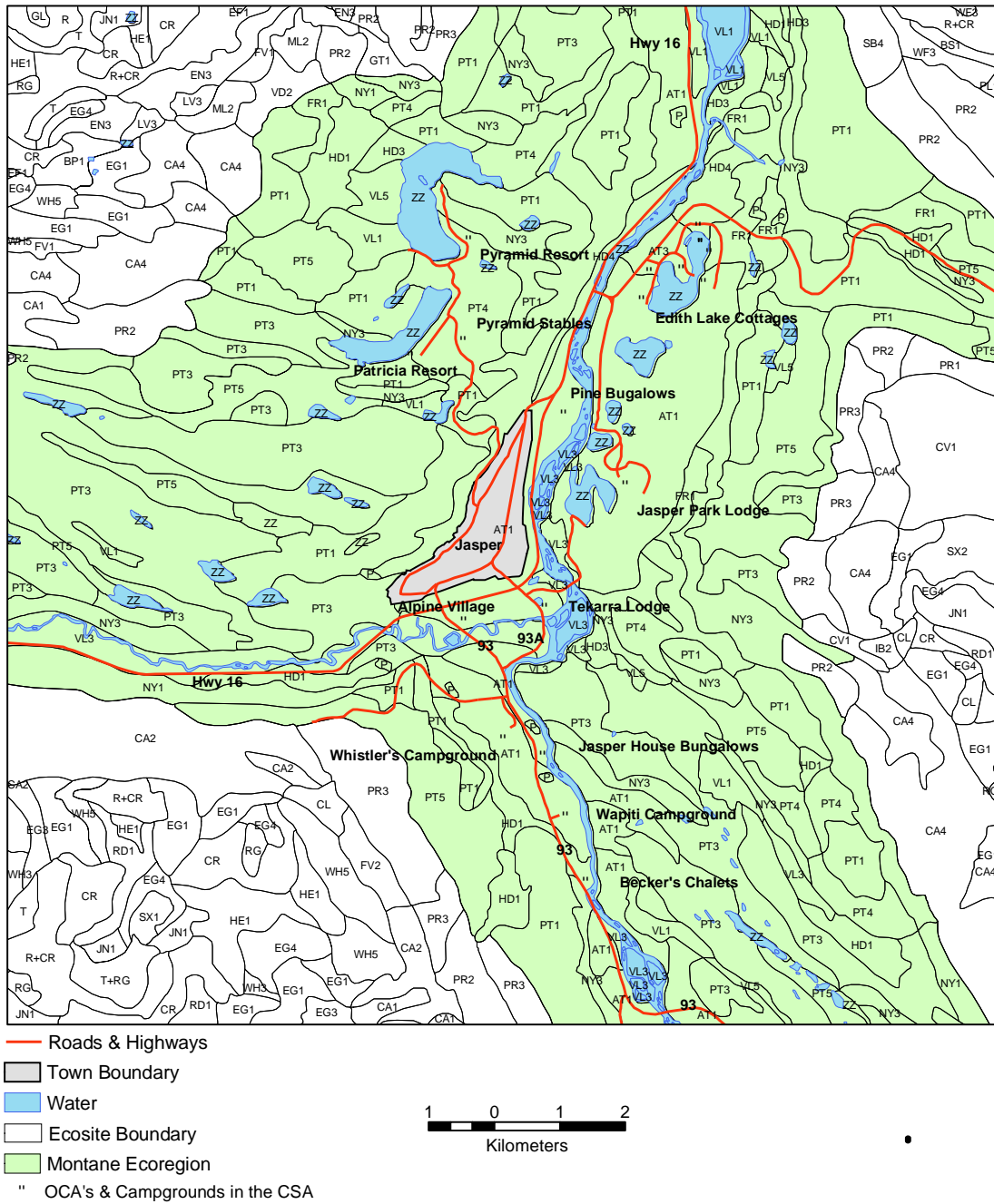


Figure 3.2 Vegetation Ecosites in Jasper and surrounding areas.

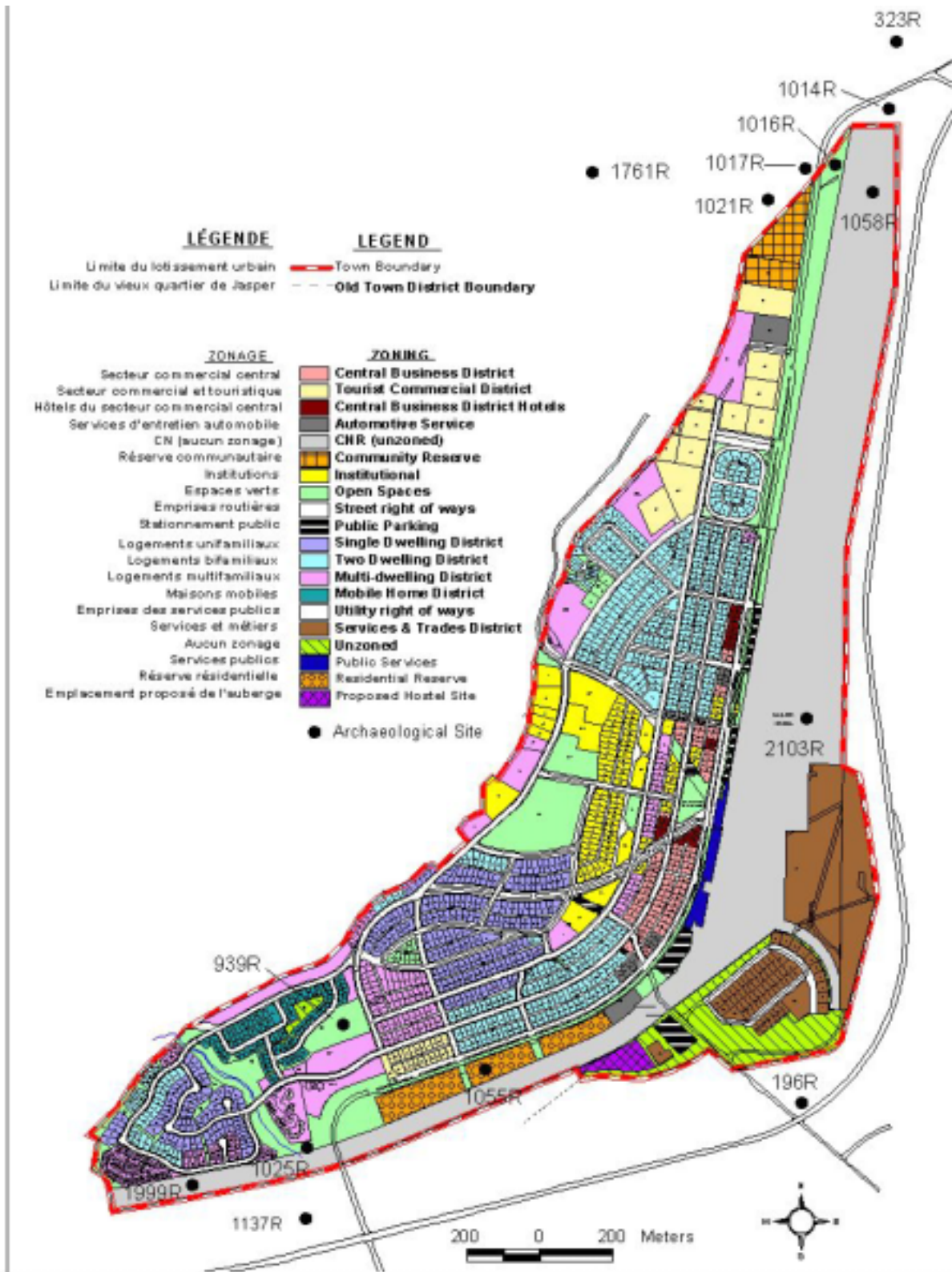


Figure 3.3 Archaeological sites and landuse designations for the community of Jasper.



- Town Boundary
- Roads & Highways
- Archaeological Site
- " Outlying Areas in the Class Screening Area

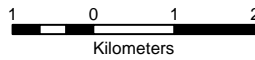


Figure 3.4 Archaeological sites near the proximate outlying areas around the community of Jasper.

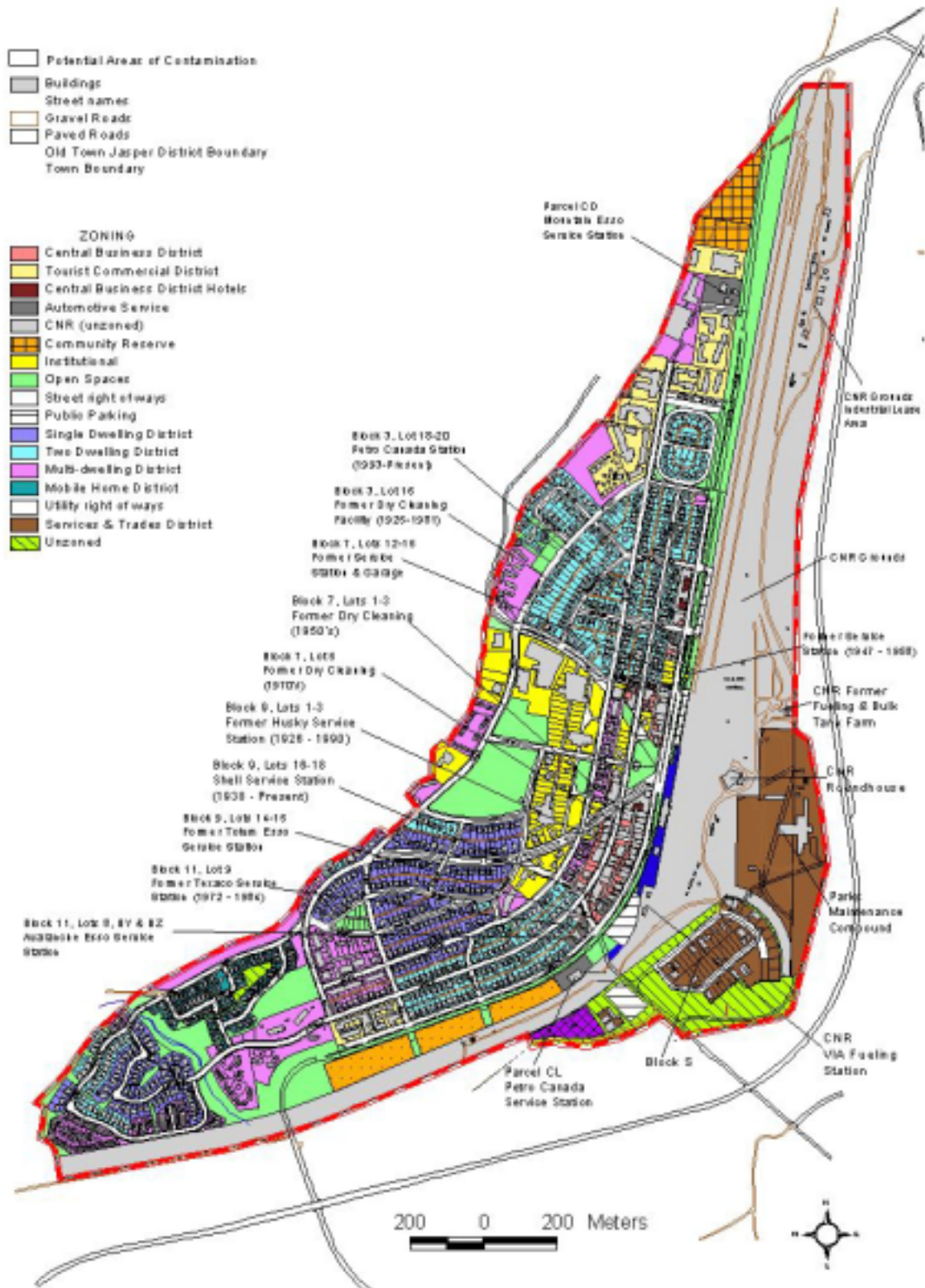


Figure 3.5 Contaminated sites within the community of Jasper.

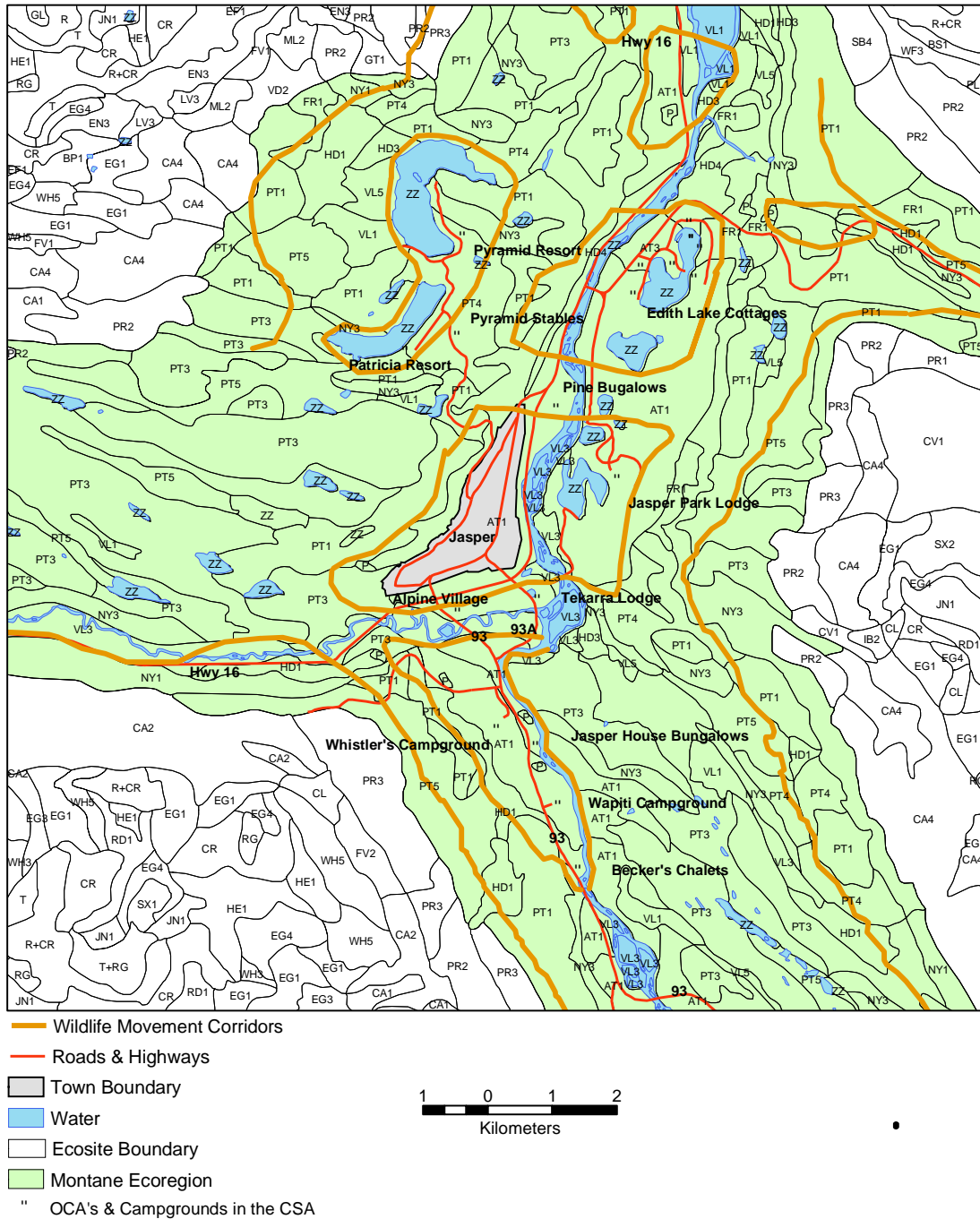


Figure 3.6 Wildlife Movement Corridors around the Town of Jasper.

4. Lake Louise, Banff National Park of Canada

4.1. Spatial Boundaries of the Class Screening Area

The Model Class Screening of Routine Projects in the Hamlet of Lake Louise, Banff National Park includes projects that occur within the boundary of the Hamlet of Lake Louise as defined in the Lake Louise Community Plan, July 1999, and within the following proximate outlying areas:

- ⊘ Lake Louise Campground
- ⊘ Lake Louise Trailer Court
- ⊘ Lake Louise Wastewater Treatment Plant
- ⊘ Parks Canada Day Use Area at Lake Louise
- ⊘ Fairview Picnic Area
- ⊘ Government Horse Corrals

Above areas (Hamlet plus proximate outlying areas) are included in the Class Screening Area (CSA).

4.2. Environmental setting

The regional environmental setting will be described followed by a more detailed description of the local setting. Tables 4.1 and 4.2 summarize the environmental sensitivities of the ecosites and land use districts.

4.2.1. Regional Setting

The hamlet of Lake Louise is located in Banff National Park of Canada just east of the Continental Divide in the Rocky Mountains, at an elevation of 1570 m ASL. The hamlet covers 82.7 hectares and falls within the Bow Valley watershed at the junction of the Bow and Pipestone Rivers. Field is situated on an alluvial fan at the base of Mount Stephen and borders the Kicking Horse River Flood plain.

The Ecological Land Classification [Achuff et.al. (1996) and Wallis et.al. (1996)] details landform and soil, vegetation and wildlife information mapped at a scale of 1:50,000, with increasing levels of detail progressing from ecoregion, to ecosection to ecosite. Ecoregions are based primarily on vegetation, which reflects microclimate, and are divided into ecosections that are based on broad landform, drainage and soil characteristics. Ecosections are further divided into ecosites, which are based on specific soil and vegetation differences. Ecosites found in the Study Area are shown in Figure 4.1.

The Montane Ecoregion is found at lower elevations in Banff National Park and is characterized by vegetation types dominated by Douglas fir/white spruce and Aspen poplar. Drier sites are characteristically grassland. The Montane Ecoregion occurs in the valley bottom from the Banff area to Castle Junction and in the Saskatchewan Crossing area.

The Subalpine Ecoregion, which occurs at elevations above the Montane, is cooler and moister, and is divided into Lower and Upper Subalpine. The dominant vegetation in the Lower

Subalpine is closed coniferous forest, with mature forests dominated by Englemann spruce and Subalpine fir. The upper boundary is about 2000 m ASL. The Upper Subalpine vegetation is transitional between Lower Subalpine closed forest and the treeless Alpine tundra, with open forests and stunted tree growth. Lake Louise occurs in the Lower Subalpine Ecoregion.

4.2.2. Air Quality

Air quality within the hamlet has not been affected by development to date. During temperature inversions traffic on the Trans Canada Highway, idling tours buses and summer campground fires contribute to decreasing air quality in the hamlet. Wood burning stoves and fireplaces are not extensive in the hamlet. Current levels of air pollution do not appear to pose a threat to ecological integrity.

4.2.3. Hydrology, Water Quality and Aquatic Resources

The hamlet of Lake Louise is located on the banks of the Bow River, which originates 50 km north at Bow Lake and the Wapta Icefields. The Pipestone River, a major tributary of the Bow River, originates 30 km northeast and drains smaller Icefields such as the Drummond and Mt. Hector. The Bow and Pipestone rivers meet at the Lake Louise hamlet. Other water bodies include Lake Louise and Louise creek. Both the Bow and Pipestone have gradual gradients and are influenced by glacial melt waters diurnal and seasonal fluctuations.

The hamlet of Lake Louise discharges treated effluent into the Bow River, which impacts water quality. The Lake Louise Wastewater Treatment Plant's upgrade will be completed in 2003 to meet existing and future demand. Effluent coliform and bacterial levels are monitored on a regular basis.

Four species of game fish are native to Banff National Park: Westslope Cutthroat, Bull Trout, Mountain Whitefish and Lake Trout. Of these Westslope Cutthroat and the Bull Trout are threatened and be becoming rare. Introduced fish in the Banff National Park include Yellowstone Cutthroat Trout, Rainbow Trout, Brown Trout, Brook Trout and Cisco. Brown trout does not occur above Bow falls at Banff. Other smaller species, native and non-native do occur.

4.2.4. Landforms and Soils

Landforms in the area are glacial and fluvial in origin. Lower Lake Louise is located at the junction of the Bow and Pipestone Rivers. The Bow River drains large lakes and Icefields to the north. Louise Creek drains Lake Louise located at the base of glaciated Mount Victoria. The Lake Louise Hamlet is located at the base of the Louise Mountain Group, part of the Continental Divide. Soils in the area are glacialfluvial in origin, with medium to coarse textured Eutric Brunisols. The geology of the area is characterized by faulted rock layers, primarily limestone with quartzite outcrops.

Slopes within Lower Lake Louise are generally flat, indicative of floodplain geomorphology. Upper Lake Louise terrain is rolling with slopes rising steeply just beyond the CSA. More detailed descriptions of the soils are associated with the ecotypes in the following section.

4.2.5. Vegetation

In Lower Lake Louise, lodgepole pine dominates the forest. Engelmann spruce-subalpine fir communities are more prominent with the rise in elevation to Upper Lake Louise and beyond. Larch species occur near the tree line in the area. Although development in Lake Louise has removed a lot of the native vegetation, there are several areas in between residential and commercial developments where the natural vegetation has not been altered. Although there is very few introduced non-native tree or shrub species, non-native plant species are very common.

Bow Valley Ecosection (BV1, BV2)

BV1 and BV2 encompass the west side of Lake Louise including Harry's Hill residential area, the tennis courts and the government horse corrals. Slopes range from 0-30% within some exposed bedrock sections. Lodgepole pine and a buffaloberry/Labrador tea understory dominate the vegetation.

Pipestone Ecosection (PP1)

PP1 includes the majority of the hamlet east of the Pipestone River. The terrain is generally flat and is located adjacent the Bow and Pipestone River floodplains. Lodgepole pine is the dominant tree species.

Consolation Valley Ecosection (CV1)

In Lower Lake Louise, this ecosection includes the Lake Louise Wastewater Treatment Plant and the trailer section of the Lake Louise Campground outside of the hamlet boundary but inside the CSA. In Upper Lake Louise this ecosection includes the Lake Louise day use area. CV1 is characterized by hummocky topography with areas of exposed bedrock. These areas are generally wet supporting lodgepole pine and Englemann spruce population.

Verdant Ecosection (VD 2)

VD 2 includes the tenting area of the Lake Louise Campground and the trailer court located in the Bow River floodplain just east of Louise Creek. Lodgepole pine/dwarf berry characterize the vegetation.

Panorama Ridge Ecosection (PR 1)

PR1 covers an area between Lower Lake Louise and Upper Lake Louise and includes Paradise Lodge and Bungalows and Parks Canada Fairview day use area. This area has been designated as part of the Fairview wildlife corridor. The terrain at the lodge is relatively flat but surrounding topography can range between 15-75%. This ecosite contains lodgepole pine/Labrador tea vegetation.

Bryant Ecosection (BY 1)

BY 1 encompasses portions of Upper Lake Louise including Deer Lodge and Timberline Tours. Slopes range from 15-75% dissected by moderate gullies. Engelmann spruce-subalpine fir is the dominant tree species with a false azalea understory. BY 1 can contain wet areas associated with valley wall seeps. BY 1 borders the Fairview wildlife corridor

Moraine Lake Ecosection (ML 1)

The Fairmont Chateau Lake Louise and Brewster Stables are located within this ecosection.

This morainal topography over sloped bedrock produces complex terrain with slopes ranging from 5 to 45%. The dominant vegetation is Engelmann spruce-subalpine fir/false azalea.

4.2.6. Wildlife Habitat and Populations

The Lower Subalpine Ecoregion is an important habitat for large carnivores. Lake Louise is located 10 km east of the Kicking Horse Pass; one of the few low passes through the Continental Divide. Wildlife must negotiate a safe passage through the Lake Louise area, Upper and Lower Bow River valleys and the Kicking Horse River Valley. The Whitehorn wildlife corridor on the north side of the valley and the Fairview wildlife corridor on the south side of the valley have been identified as important areas in facilitating large carnivore movement around the hamlet, through the middle Bow Valley.

Large carnivores such as wolverine, wolves, lynx, black bear and grizzly use the Bow Valley to travel between areas of good habitat. In the summer, areas around Lake Louise provide high quality habitat for the grizzly bear population. The Skoki valley, located 10 km northeast of Lake Louise in the backcountry, is considered highly important for female grizzly bears. In the winter, species such as lynx are able to survive in the deep snow pack and benefit from the local hare and marten population. Although there are no resident wolf packs in the area, the Lower Bow Valley wolf pack does travel as far as Lake Louise and beyond in search of food.

The ecosites in the area are rated as medium importance to ungulates such as moose and elk; and are rated low for deer. Snow accumulations in the Lake Louise area are too deep in the winter to provide good foraging opportunities. Most ungulates will winter at lower elevations and will migrate to the north side of the valley in the late spring.

Small mammals occur in moderate populations. In particular, the Columbian Squirrel population is thriving in Lower Lake Louise.

There have been many formal and informal research projects in the area that include Grizzly bear, black bear, lynx, wolf, wolverine, moose and multi-species corridor movement. Informal surveys for goat have also been completed.

Lake Louise is situated in highly productive grizzly bear habitat and the surrounding area supports a significant grizzly bear population. Due to the close proximity of bears and humans in the same area, wildlife habituation is common. Managing for a high visitor use and sustaining an effective grizzly bear population can be challenging.

4.2.7. Heritage Resources

The Banff National Park of Canada Archaeological Resource Description and Analysis (2002) identified significant sites as aboriginal, historic, historic/aboriginal and palaeontological. In the Lake Louise area, 30 historic sites have been identified mostly associated with early logging and mining exploration, the construction and maintenance of the railway and development of tourist facilities. One precontact site has been found in the CSA. One zooarchaeological was recorded when a bison skull was discovered under the TransCanada Highway near the interchange for Lake Louise, a location outside the CSA.

The Lake Louise Community Plan identified buildings of cultural significance. These include:

- ☞ Train Station
- ☞ Post Hotel
- ☞ Paradise Bungalows
- ☞ Fairmont Chateau Lake Louise (painter wing)
- ☞ Swiss Guides Cottage
- ☞ Schloss Residence
- ☞ Deer Lodge
- ☞ Rocky Mountain Tours Garage

The Built Heritage Resource Description and Analysis is used to guide development in maintaining the heritage character in Lake Louise.

4.2.8. Socio-economics

Increasing pressures from outside the Lake Louise community include:

- ☞ Increasing number of park visitors and
- ☞ Increasing number of residents
- ☞ Allowing for certain recreational opportunities

Over the past decade, Lake Louise's population has increased to accommodate the local tourism needs. The present population is 1915 with a future limit of 2,200. Future increases in residency and tourism facilities will increase the pressure on water and wastewater treatment facilities and village power and road infrastructure.

Under CEAA, only those socio-economic effects that result directly from environmental effects need to be addressed in environmental assessment. In Lake Louise, for example, if poor water quality in Lake Louise or the Bow River began to affect fishing and consequently tourism, the socio-economic effects of poor water quality would need to be considered. To date this is not the case, therefore socio-economic issues are not specifically addressed further in the MCSR.

4.2.9. Aesthetics

The majority of tourists in the Lake Louise area visit for the mountain viewsapes. Lake Louise and Moraine Lake offer easy access to a few of the most famous views in the National Park system. Existing and future development combined with 20,000 visitors/day in the summer detract from these viewsapes. Visual and noise effects, as well as increased numbers of tourists, could result in a decreased wilderness experience.

Tables 4.1 The environmental sensitivities of the land use districts in and around Lake Louise.

Land Use	Environmental Description (ecosite)	Sensitivities
Lower Lake Louise # Residential RE – Residential East side of hamlet	Bow Valley Ecosite BV1 and BV2	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils. # Glaciofluvial material over hummocky bedrock may present blasting situations in foundation excavation. # Adjacent to the Whitehorn wildlife corridor; important area for birds, carnivores and moose.
RW – Residential West side of hamlet	Pipestone Ecosection PP1	# Periodic high water table may require dewatering during construction phase. # Important area for carnivores.
# Commercial LLL – Lower Lake Louise	Bow Valley Ecosite BV1	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils.
# Institutional, Railways and Utilities	Bow Valley Ecosite BV1 Pipestone Ecosection PP1	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils. # Important area for carnivores.
# Environmental Reserve	Bow Valley Ecosite BV1 Pipestone Ecosection PP1	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils. # Important area for carnivores.
# Outdoor Recreation	Bow Valley Ecosite BV1 Pipestone Ecosection PP1	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils. # Important area for carnivores.
# Industrial	Bow Valley Ecosection BV1 and BV 2	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils.
# Public Parking	Bow Valley Ecosection BV1 Pipestone Ecosection PP1	# Periodic high water table may require dewatering during construction phase. # Stable, well drained glaciofluvial soils. # Important area for carnivores.
# Upper Lake Louise Commercial	Bryant Ecosection BY1 Moraine Lake Ecosection ML1	# Well drained soils. # Periodic high water table may require dewatering during construction phase. # Adjacent to the Fairview wildlife corridor
Parks Canada Day Use – Fairview	Bryant Ecosection BY1	# Well drained soils.

Land Use	Environmental Description (ecosite)	Sensitivities
		<ul style="list-style-type: none"> ⚡ Periodic high water table may require dewatering during construction phase. ⚡ Adjacent to the Fairview wildlife corridor.
Park Canada Day Use – Lake Louise	Consolation Valley CV1	<ul style="list-style-type: none"> ⚡ Wet areas susceptible to drainage problems. ⚡ Adjacent to the Fairview wildlife corridor.

Tables 4.2 Environmental sensitivities of the ecosites within and around Lake Louise and development status.

Ecosection/ Ecosite	Service/Utility Facilities Present	Development Status	Sensitivities
Bow Valley BV1, BV2	<ul style="list-style-type: none"> ⚡ Contains underground and aboveground services. 	<ul style="list-style-type: none"> ⚡ Mostly developed with some undisturbed lots. All roads that access residential and commercial areas are paved. ⚡ Large areas of undisturbed landscape surround Harry’s Hill residential area and the Government horse corrals. ⚡ Contains parts of the Bow River loop trail. 	<ul style="list-style-type: none"> ⚡ Area is important to large carnivores including grizzly and lynx. ⚡ Adjacent to the Whitehorn wildlife corridor. ⚡ Moderately important to ungulates, small mammals and breeding birds. ⚡ Possible wildlife highway crossing just west of Lake Louise.
Pipestone PP1	<ul style="list-style-type: none"> ⚡ Contains underground and aboveground services. ⚡ Groundwater wells and chlorination building. 	<ul style="list-style-type: none"> ⚡ Mostly developed with some undisturbed lots. All roads that access residential and commercial areas are paved. ⚡ Contains parts of the Bow River loop trail. 	<ul style="list-style-type: none"> ⚡ Highly important to large carnivores and moderately important for ungulates. ⚡ Close proximity to Bow and Pipestone rivers.
Consolation Valley CV1	<ul style="list-style-type: none"> ⚡ Contains underground and aboveground services. ⚡ Lake Louise Wastewater Treatment Plant (LLWWTP) and Lake Louise Campground 	<ul style="list-style-type: none"> ⚡ Moderately developed. Lots of natural vegetation and undisturbed areas throughout the campground. ⚡ Contains parts of the Bow River loop trail. ⚡ Includes paved and unpaved roads accessing facilities. 	<ul style="list-style-type: none"> ⚡ Highly important to large carnivores and moderate for ungulates. ⚡ Adjacent to the Bow River. ⚡ Possible wildlife highway crossing just east of Lake Louise. Congested area with highway, Railway, Bow River, LLWWTP and campground.
Verdant VD2	<ul style="list-style-type: none"> ⚡ Lake Louise Campground and trailer court 	<ul style="list-style-type: none"> ⚡ Moderately developed. Lots of natural vegetation and undisturbed areas throughout the campground. ⚡ Includes paved and unpaved roads accessing facilities. 	<ul style="list-style-type: none"> ⚡ Adjacent to the Bow River and Louise Creek. ⚡ High importance to large carnivores.
Panorama PR 1	<ul style="list-style-type: none"> ⚡ Paradise Lodge and Bungalows, Parks Canada Day Use Area. 	<ul style="list-style-type: none"> ⚡ Disturbed lot surrounded by vast undisturbed areas. 	<ul style="list-style-type: none"> ⚡ Highly important to large carnivores. ⚡ Located within Fairview Wildlife corridor.
Bryant	<ul style="list-style-type: none"> ⚡ Includes all 	<ul style="list-style-type: none"> ⚡ Mostly developed containing 	<ul style="list-style-type: none"> ⚡ Moderately important to

Ecosection/ Ecosite	Service/Utility Facilities Present	Development Status	Sensitivities
BY1	commercial facilities near Lake Louise ☞ Contains underground and aboveground services.	paved and unpaved roadways.	carnivores. ☞ Adjacent to the Fairview wildlife corridor. ☞ Borders Lake Louise and Louise Creek.
Moraine Lake ML1	☞ Parks Canada Day Use Area	☞ Contains 2 large parking lots and 2 washroom facilities.	☞ Moderately important to lynx; low importance to ungulates. ☞ Adjacent to the Fairview Wildlife corridor. ☞ Borders Lake Louise and Louise Creek.

4.3. Description of Current Infrastructure in Each Project Class

4.3.1. Subclass 1 – Buildings

Lake Louise

The following land use areas are contained within the Class Screening Area.

Residential land use units vary in density and can be categorized into two types.

☞ Single family dwellings and duplexes, accommodating longer term and senior staff, are located on Harry’s Hill on the west end of the hamlet. The trailer court also contains privately owned residences and is located outside the eastern hamlet boundary on the Bow River flats. According to the Lake Louise Community plan, the trailer court will be decommissioned in 2005

☞ Multi-unit dwellings for families and senior management are located in Fairview, Pinnacle, Temple and Hector subdivisions. Multi-unit dwellings for short term and entry-level staff are located in Saddleback, Moraine Circle, Charleston and the station. They are typically located on flatter ground. All of the residential areas excluding Harry’s Hill, Saddleback and Moraine Circle are located on the banks of the Pipestone and Bow Rivers.

Commercial

☞ The commercial area containing Samson Mall, two gas stations, one restaurant and four hotels is located off Village Road, the main road through the centre of the hamlet. The Station restaurant is the anomaly as it is located on the southwest boundary at the end of station road. All commercial services are located on flat terrain with the Samson mall, the Post Hotel and Lake Louise Inn adjacent the Pipestone River.

☞ Areas inside the hamlet boundary located in Upper Lake Louise include Paradise Lodge and Bungalows, Deer Lodge, Timberline Tours, Brewster Stables and the Fairmont Chateau Lake Louise.

Institutional, Railways and Utilities. The RCMP (Royal Canadian Mounted Police), medical clinic, and Parks Canada visitor resource centre are located off of Village road. The CPR railway line runs east/west through the centre of the hamlet with a small operational area located off the station road at the southwest end.

Environmental Reserve areas are located throughout the hamlet and are categorized as follows:

- “A” trails permitted
- “B” trails and picnic sites permitted

These are small undisturbed areas characteristic of the two main ecosites in the area. Many appear to be buffers between residential areas and the CP railway.

Outdoor Recreation areas are located in two areas. The community centre, skating rink, tennis court and baseball diamonds are located on the east end of the hamlet. The skateboard park is located on the west end of Lake Louise near Harry’s Hill.

Industrial areas include the trades complex, Parks Canada compound and horse corrals located at the western edge of the hamlet and the Lake Louise Wastewater Treatment Plant at the east end of the CSA.

Public Parking lots are located near visitor services, the community centre and the Parks Canada Lake Louise Day Use Area.

4.3.2. Subclass 2 – Service Lines

Utility service lines covered in this sub-class include:

- ≠ Water, stormwater and sanitary service provided by the hamlet of Lake Louise.
 - ≠ Electrical power provided by EPCOR.
 - ≠ Propane provided by Superior or ICG; and
 - ≠ Telephone services provided by Telus
- There are no cable services in Lake Louise.

Both underground and aboveground services are included. Present utility services are provided for a resident population of 1965. Underground Services could include: water, stormwater, sewer, telephone, cable, electricity and propane. Aboveground services include electricity and telephone.

4.3.3. Subclass 3 – Roads

Roads include all named streets in the hamlet and roads servicing facilities in Upper Lake Louise. Lake Louise Drive is included. Roads are typically 9 to 12 m in width, surfaced with asphalt curbed and guttered. Roads accessing the LLWWTP, the Lake Louise campground and some roads in Upper Lake Louise are gravel surfaced without curbs or gutters. Most residential streets have two lanes.

Sidewalks are rare in Lower Lake Louise and only occur at the Samson Mall. Upper Lake

Louise contains sidewalks linking the Fairmont Chateau Lake Louise and the Parks Canada Day Use Area with the Lake Louise waterfront. All sidewalks are cement.

Pedestrian pathways provide links between the Pinnacle/Fairview subdivisions and the Post Hotel and between the Bow River loop and Samson Mall. These two pathways are 1-2m wide and surfaced with gravel or asphalt. There are many informal trails throughout the hamlet.

Parking lots typically accommodate less than 75 stalls and are asphalt surfaced. Upper Lake Louise contains 2 large parking lots over 75 stalls.

In winter, icy roads are maintained using liquid MgCl, rock salt and abrasives. No dust control occurs in summer. All of these roadways, lanes, sidewalks, boardwalks, and parking lots are included in the sub-class.

4.3.4. Subclass 4 – Trails, Parks and Recreation Grounds

The Bow River Loop trail is the only trail included in the CSA. The loop is approximately 7 km long and runs along both sides of the Bow River from the Train Station restaurant to the east end of the Lake Louise Campground. This gravel surfaced trail is 1-2 m wide.

Parks and recreation grounds located within the hamlet boundary include:

- ⌘ Lake Louise Recreation Centre ball diamonds, tennis courts and outdoor hockey rink.
- ⌘ Harry's Hill skateboard park.
- ⌘ Minor horticulture (weed control and pruning) at various sites.

4.4. Cumulative Effects

4.4.1. Inside Lake Louise Boundary

Cumulative Effects Assessment (CEA) for individual projects within the community of Lake Louise (which are screened under the MCSR) will be based on the Lake Louise Community Plan. The community plan identifies potential future projects and limits to the growth that may occur in the community of Lake Louise. An environmental assessment, including a cumulative effects assessment, was conducted on this plan which identified the potential for cumulative effects resulting from increased sewage waste, limited electrical power, obstruction to wildlife movement and wildlife-human conflicts. After considering the proposed mitigation and growth, the environmental assessment concluded that the cumulative effects were not significant and this conclusion is considered valid today. Therefore, it is reasonable to assume that future projects that conform to the Lake Louise Community Plan will be unlikely to result in significant cumulative environmental effects and therefore do not require individual CEA.

If the Lake Louise Community Plan changes, and permitted densities of development or areas of commercial development increase, a new CEA will be undertaken. Individual projects that conform to the new community plan will not require CEA. If a project falls outside of the class screening, an individual CEA will be required.

4.4.2. Inside the CSA, but outside Lake Louise Village Boundary

In a similar way, CEA will not be necessary for projects that are consistent with the Banff National Park of Canada Management Plan. This plan has undergone an environmental assessment, including cumulative effects assessment. The environmental assessment concluded that the cumulative effects were not significant and this conclusion is still considered valid today. As long as renovations at the sites conform to these plans, CEA will not be necessary. Projects not covered by the MCSR will require individual environmental assessments, including cumulative effects assessments.

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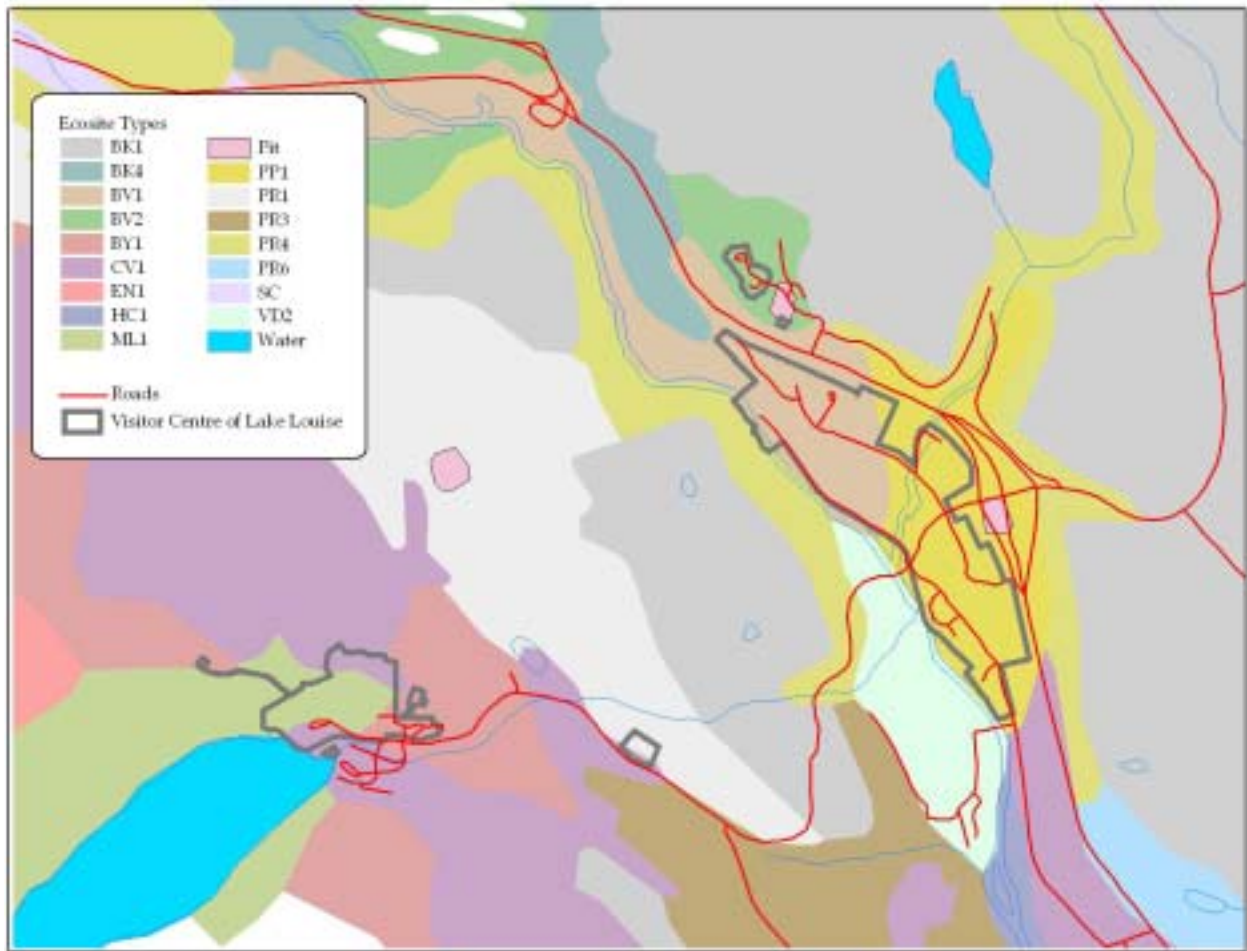


Figure 4.1 Ecosite types in and around the Visitor Centre of Lake Louise.

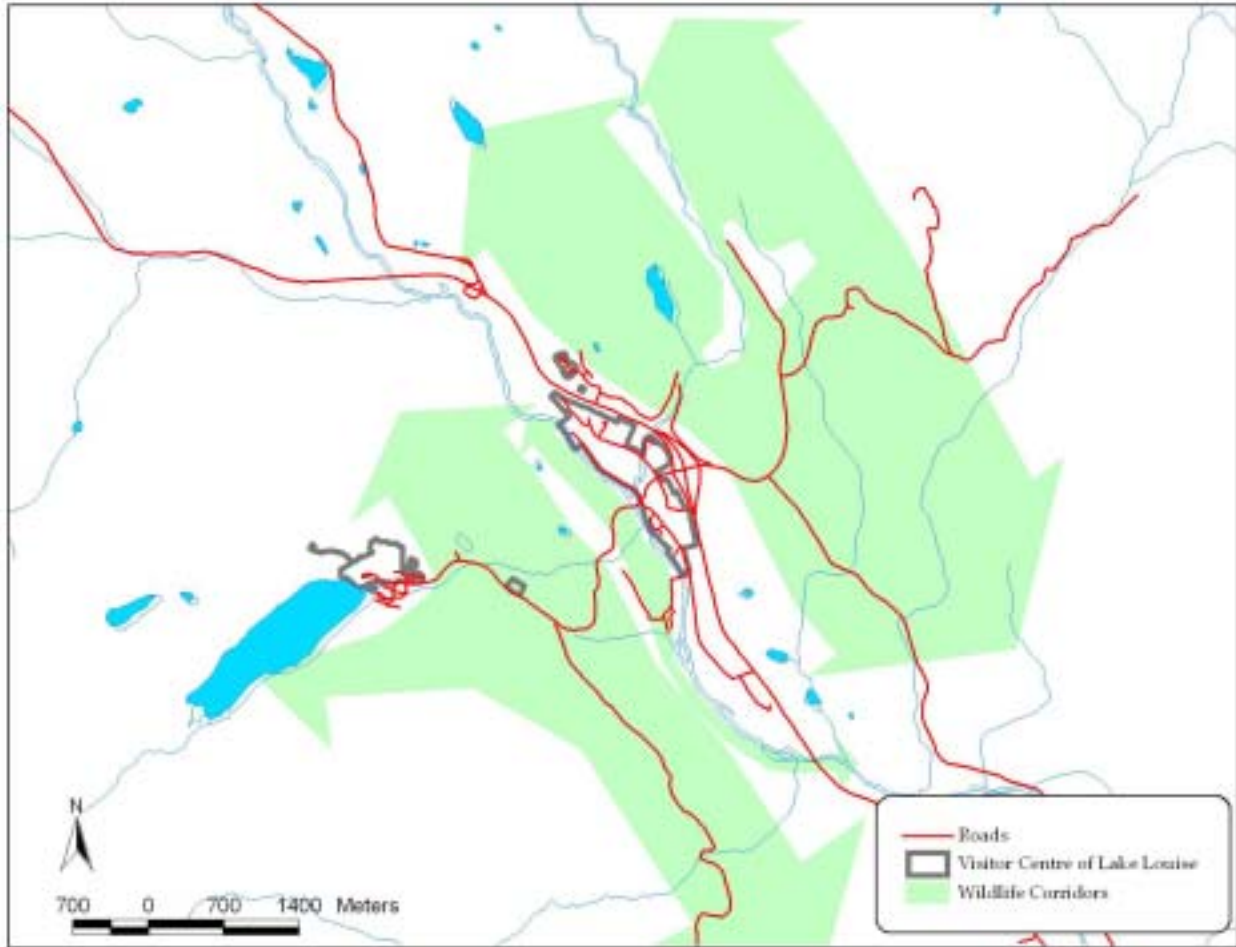


Figure 4.2 Wildlife Corridors in and around the Visitor Centre of Lake Louise.

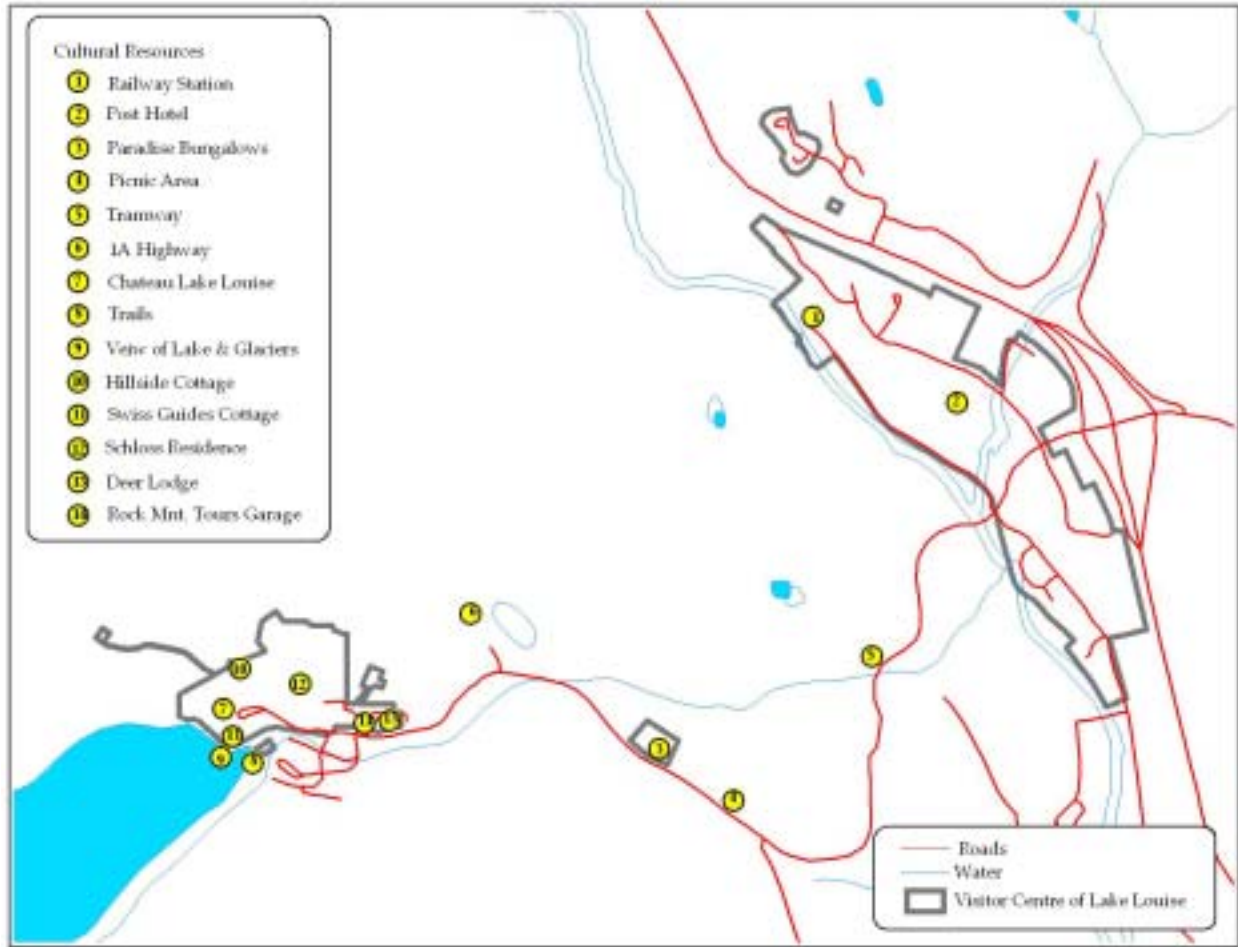


Figure 4.3 Cultural Resources in and around the Visitor Centre of Lake Louise.

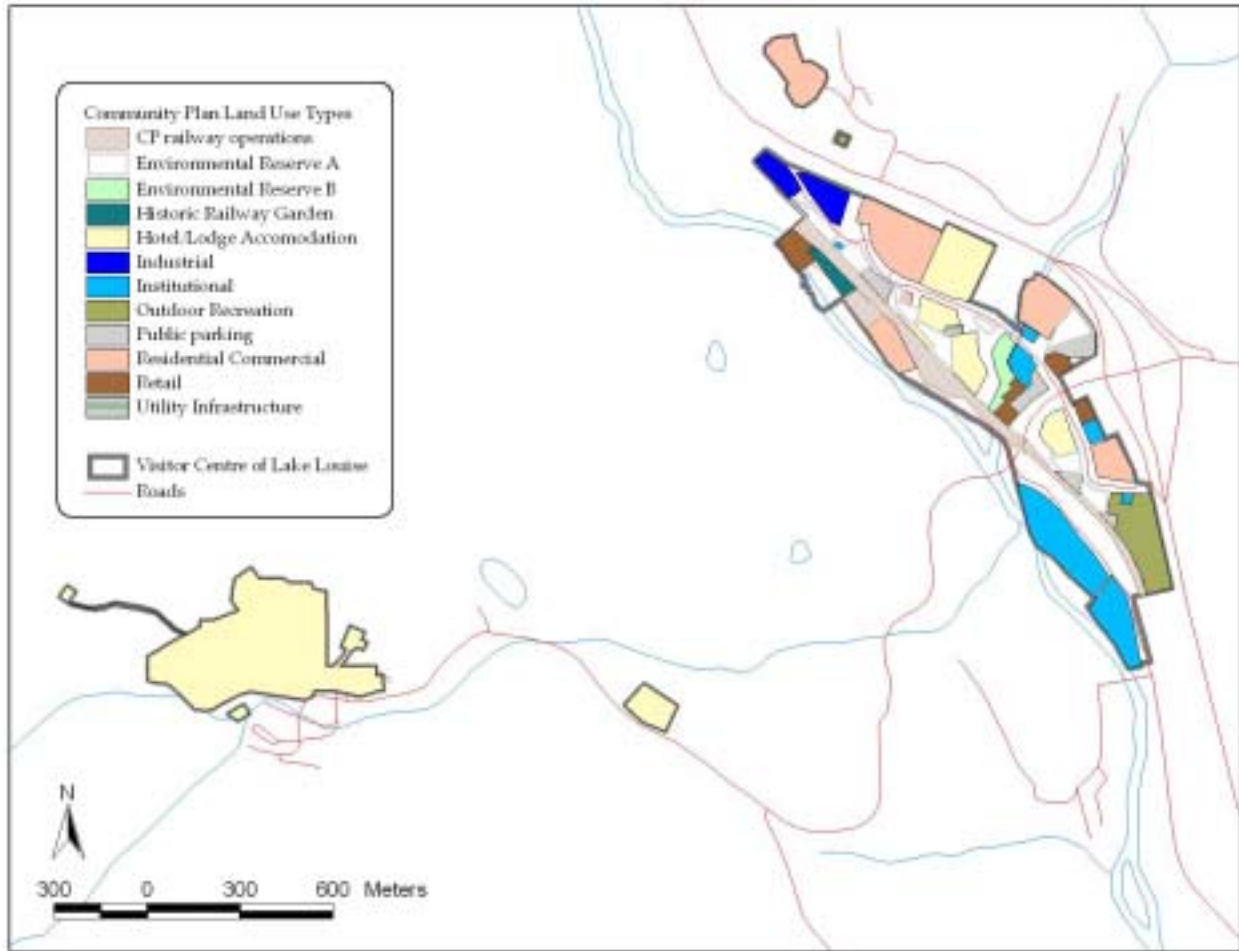


Figure 4.4 Land Use Types for the Visitor Centre of Lake Louise.

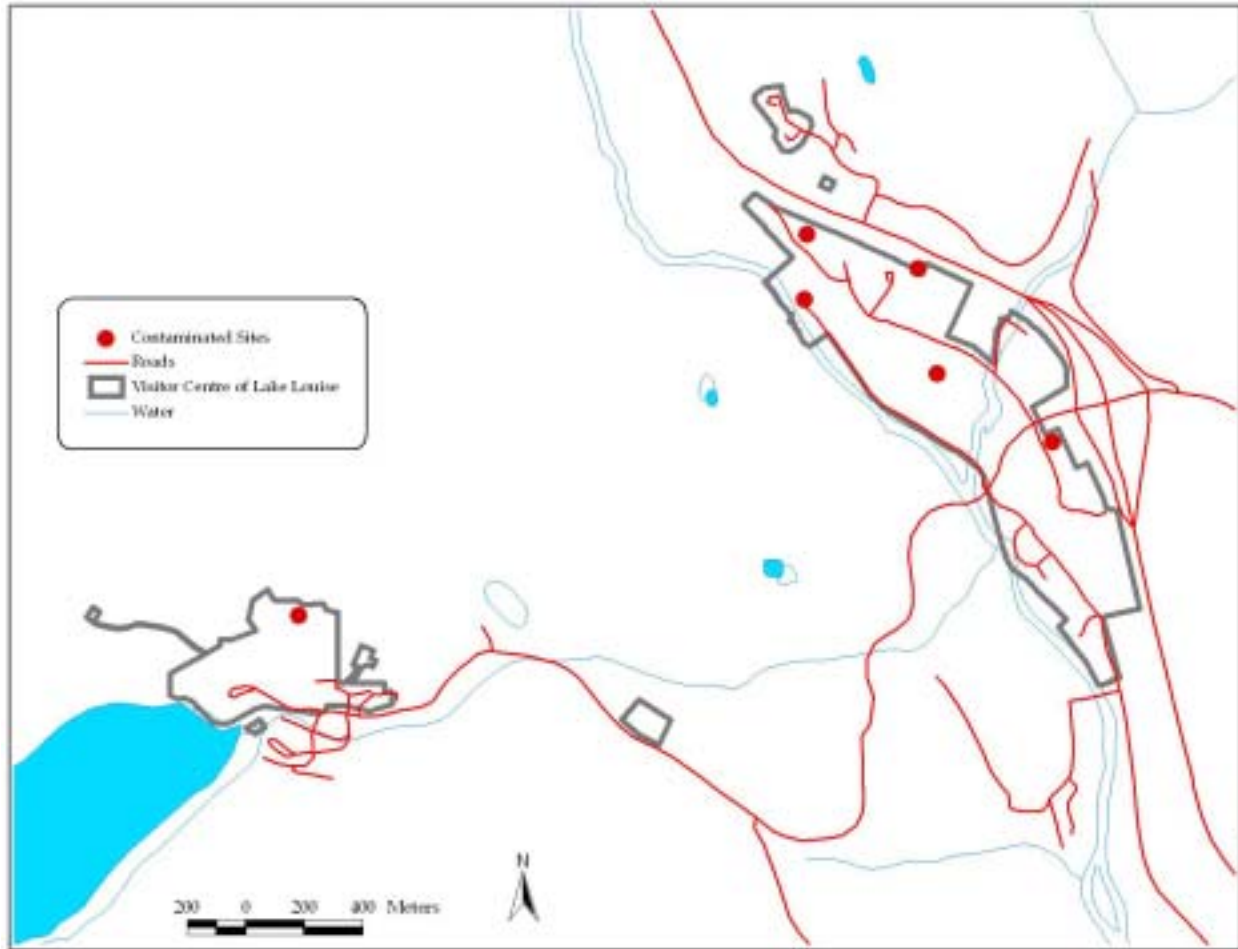


Figure 4.5 Contaminated site in the Visitor Centre of Lake Louise.