



CARCROSS LOCAL AREA PLAN

FINAL *DRAFT* PLAN FOR COMMUNITY REVIEW

February 2013

Prepared by
Inukshuk Planning & Development LTD.

CARCROSS/TAGISH
FIRST NATION



Yukon
Energy, Mines and Resources

TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF MAPS, TABLES, FIGURES AND SCHEDULE	iii
CARCROSS 2030 VISION STATEMENT.....	1
1.0 INTRODUCTION	2
1.1 PURPOSE OF THE LOCAL AREA PLAN	2
1.2 HOW THE LOCAL AREA PLAN WAS PREPARED.....	3
1.3 ORGANIZATION OF THE DOCUMENT.....	5
1.4 ACKNOWLEDGEMENTS	6
PART 1: ANALYSIS	
2.0 CARCROSS AREA CHARACTERISTICS	8
2.1 HISTORY.....	8
2.2 COMMUNITY PROFILE.....	10
2.3 BIOPHYSICAL ENVIRONMENT	14
2.3.1 Landscape Conditions	14
2.3.2 Vegetation.....	15
2.3.3 Fish & Wildlife	15
3.0 LAND USE & TENURE.....	24
3.1 EXISTING LAND USE	24
3.1.1 Residential.....	25
3.1.2 Commercial	28
3.1.3 Institutional	28
3.1.4 Parks & Open Space	28
3.1.5 Industrial	29
3.2 LAND TENURE.....	29
3.3 LAND OWNERSHIP	30
4.0 PLANNING ISSUES & OPPORTUNITIES	34
4.1 SUSTAINABLE DEVELOPMENT.....	34
4.2 COMMUNITY GROWTH.....	35
4.3 ENVIRONMENTAL VALUES.....	37
4.4 SERVICING	43
4.5 HERITAGE VALUES	44
4.6 ECONOMIC DEVELOPMENT.....	48

4.7	<i>TRANSPORTATION</i>	49
4.8	<i>HEALTH & SAFETY</i>	51
4.9	<i>TRADITIONAL LAND VALUES</i>	57
4.10	<i>CLIMATE CHANGE</i>	57
PART 2: RESULTS		
5.0	LAND USE DESIGNATIONS AND POLICIES	63
5.1	<i>COMMUNITY & YOUTH VISION STATEMENTS</i>	63
5.2	<i>COMMUNITY VALUES DESCRIPTION</i>	64
5.3	<i>COMMUNITY DEVELOPMENT PRINCIPLES</i>	70
5.4	<i>LOCAL AREA PLAN OBJECTIVES, POLICIES & ACTIONS</i>	71
5.4.1	Growth Management.....	71
5.4.2	Environmental Stewardship	75
5.4.3	Heritage Conservation	77
5.4.4	Community Health & Wellness	78
5.4.5	Economic Diversification.....	81
5.4.6	Governance & Cooperative Management.....	83
5.5	<i>LAND USE DESIGNATIONS AND POLICIES</i>	83
5.5.1	Environmental Protection (EP).....	84
5.5.2	Residential (R)	84
5.5.3	Country Residential (CR)	85
5.5.4	Downtown Core Commercial (DCC)	86
5.5.5	Comprehensive Mixed Use (CMU).....	87
5.5.6	Highway Commercial (HC)	87
5.5.7	Community Use / Traditional Use (CU/TU).....	88
5.5.8	Light Industrial (LI)	88
5.5.9	Future Development (FD)	89
5.6	<i>LAND USE PLAN</i>	89
5.6.1	Interpretation of Land Use Boundaries.....	89
6.0	IMPLEMENTATION	92
7.0	PLAN REVIEW AND AMENDMENT	95
GLOSSARY		96

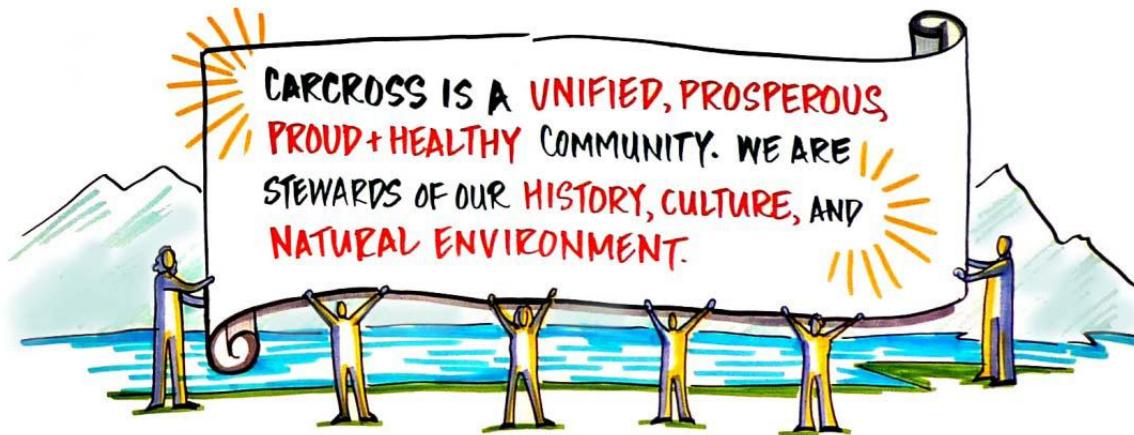
LIST OF MAPS, TABLES, FIGURES AND SCHEDULE

Map 1	Community Orientation Map.....	12
Map 2	Baikal Sedge Values.....	18
Map 3	Key Wildlife Areas in the Carcross Region.....	20
Map 4	Wetland & Fisheries Values	22
Map 5	Land Use According to Current Zoning	26
Map 6	Main Land Ownership.....	32
Map 7	Carcross Historic Sites.....	46
Map 8	Issues, Opportunities and Concerns.....	60
Table 1	Land Use By Current Zoning.....	24
Table 2	Land Tenure Disposition.....	30
Table 3	Land Ownership.....	31
Table 4	Carcross Population Projection Scenarios 2012-2030.....	36
Table 5	Contaminated Sites within the Carcross LAP Boundary.....	54
Table 6	Potential Climate Change Stressors and Impacts on Carcross Region Physical Environment Sites.....	58
Table 7	Potential Climate Change Stressors and Impacts on Carcross Region Built Environment.....	59
Figure 1	Carcross Local Area Plan Boundary.....	3
Figure 2	Carcross Aerodrome Reserve and surrounding land uses.....	51
Figure 3	Conceptual Alternate Access Route.....	52
Figure 4	Sites of Local Concern for Potential Contamination.....	56
Figure 5	Carcross Community Vision Workshop Graphic Facilitation.....	65
Figure 6	Carcross Student Vision Workshop Graphic Facilitation – Part 1.....	66
Figure 7	Carcross Student Vision Workshop Graphic Facilitation – Part 2.....	67
Figure 8	Carcross Community Values Afternoon Workshop Graphic Facilitation.....	68
Figure 9	Carcross Community Values Evening Workshop Graphic Facilitation.....	69
Schedule A	Land Use Map.....	90

CARCROSS 2030 VISION STATEMENT

The **2030 Vision Statement** is the foundation of the Carcross Local Area Plan. It was developed in collaboration with participating community members during a series of workshops held in May and June 2011. It is a reflection of the unique qualities, common values, aspirations and expectations of the entire Carcross community.

The Vision Statement provides the framework for development of principles, objectives, policies and implementation actions contained within the Carcross Local Area Plan. Simply put, the Vision Statement summarizes the kind of future the community wants while the contents of the plan provide a roadmap on what actions need to be taken to get there.



1.0 INTRODUCTION

1.1 PURPOSE OF THE LOCAL AREA PLAN

The purpose of the Carcross Local Area Plan (LAP) is to guide land use and development for public, private and Settlement Lands within the planning area boundary in a manner which meets the present and future needs and expectations of the community.

Carcross is an unincorporated community. As such, land use planning for non-Settlement Lands¹ is the responsibility of the Government of Yukon (YG), Department of Energy, Mines and Resources (EMR) and carried out by the Land Planning Branch. The branch is also responsible for land use administration including *Area Development (Zoning) Regulations* under the *Yukon Area Development Act*. The Minister is responsible for signing off and implementing the Carcross LAP on behalf of the YG.

Carcross/Tagish First Nation (C/TFN) will be responsible for signing off the Carcross LAP for Settlement Lands. Land use planning for Settlement Lands is the jurisdiction of the C/TFN under the Section 13 of C/TFN Self-Government Agreement. Once C/TFN enacts a Lands Act, it will be able to develop zoning regulations for its Settlement Lands. Until such time, laws of general application such as *Carcross General Development Regulations* will continue to apply.

Pursuant to Section 31 of the C/TFN Self-Government Agreement the Carcross LAP has been jointly developed between YG and C/TFN in order to coordinate their land use planning interests and achieve community goals. The plan provides a common framework for the development of both Settlement and non-Settlement Lands while recognizing C/TFN and YG jurisdiction.

According to Section 31.11 of the Self-Government Agreement, the objectives of the Carcross LAP are:

- to achieve the safe, healthy and orderly development and use of land and patterns of human activities within the plan area;
- to maintain and improve the quality, compatibility and use of the physical and natural environment within which the patterns of human activities are situated within the plan area;
- to consider the use and development of land and other resources in adjacent areas; and
- to determine a process for subsequent review of amendments of the plan.

Both YG and C/TFN intend to ratify and adopt the Carcross LAP and apply the land use policies contained herein in a consistent manner to guide land development and management decisions within their respective jurisdictions. YG and C/TFN will jointly develop new area development regulations for the planning area in order to implement land use direction contained within the Carcross LAP.

¹ Non-Settlement Lands are made up of Commissioner's and private land.

The Carcross LAP is the reference document for future land uses in the planning area. It will be used by C/TFN and YG for evaluating development proposals and subdivision applications.

Further, it can be used by community members and organisations as an advocacy instrument to facilitate discussion about desired community infrastructure projects and as a measuring tool for development progress. The planning timeframe considered for the implementation of this plan is 20 years.

1.2 HOW THE LOCAL AREA PLAN WAS PREPARED

The Carcross LAP is a result of a collaborative process and is reflective of input received from local residents, community organizations, government agencies as well as background information collected in the beginning of the planning process.

The planning boundary for the Carcross LAP was negotiated at the onset of the planning process between YG and C/TFN. Both governments agreed to draw the boundaries close to the community centre while incorporating all services pertaining to the operation of the community, such as the garbage transfer station, water intake and sewage lagoon. The planning area is depicted in **Figure 1**.

Preparation of the Carcross LAP, including the selection of the planning consultant, was guided by a six-member Planning Committee, whose membership was appointed in equal proportions by each government. The Committee's mandate was to establish a public consultation process which provided opportunities for community members to express their ideas, views and concerns and prepare a plan that they would recommend to C/TFN and YG for approval.

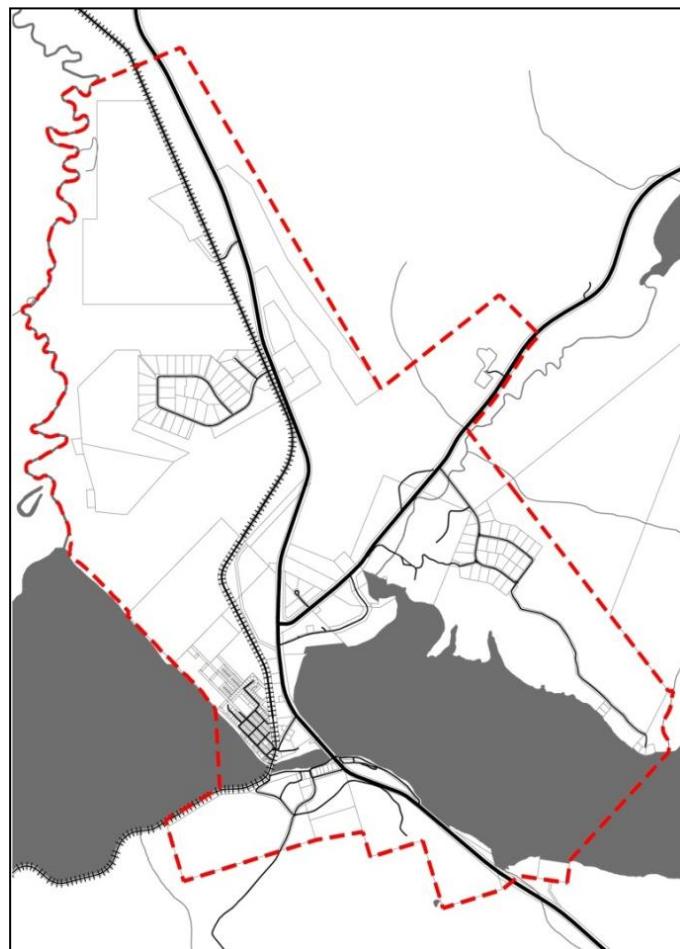


Figure 1: Carcross Local Area Plan Boundary

The Planning Committee was supported by technical advisory representatives from both Yukon and C/TFN governments. The background work, community facilitation and plan preparation was assigned to the consulting firm Inukshuk Planning and Development Ltd. in collaboration

with EDI Environmental Dynamics Inc. Work on the project commenced in the spring of 2011 and was completed in December 2012.

Over the course of plan development, approximately 16 meetings were held with members of the Planning Committee and government technical advisors. Meeting minutes were made available for public review through the Carcross LAP website. In addition, several newsletter updates were prepared at key points in the process and distributed to all residents and property owners within Carcross and surrounding areas (Lewes Lake, Spirit Lake and Crag Lake) as well as others who expressed interest in the plan. Newsletters were also posted in digital form on the website.

Technical consultation occurred with relevant departments of both the Yukon and C/TFN governments to obtain useful background information on the Carcross local planning area and receive feedback to proposed planning options. This information was summarized in both text form and on a series of maps contained in the Situational Analysis as well as in the subsequent Planning Options Overview reports. These reports were made available to the public through the Carcross LAP website following governments and Planning Committee review.

A number of public workshops were held to gather necessary community feedback at key points of the planning process. These workshops included:

- two community and one student *Values Workshops* held on April 20, 2011;
- two community and one student *Visioning Workshops* held on May 31, 2011;
- two *Draft Plan Community Workshops* held on June 27, 2012; and
- a *Draft Carcross Local Area Plan Presentation* held during February 2013.

On average, each community workshop attracted 20-30 participants. Workshop participants were encouraged to provide additional feedback through three separate community questionnaires, each of which contained survey questions relevant to the workshop at hand. The most detailed of these questionnaires was the *Community Feedback Form* which was submitted alongside a description of the proposed planning options in June 2012. It received 81 individual responses during a one month period. This high response rate was aided through the recruitment of a Community Liaison person who provided assistance to community members to complete their survey.

1.3 ORGANIZATION OF THE DOCUMENT

The Carcross Local Area Plan is organized into two parts.

Part 1: Analysis provides historical and contemporary context for land use planning in the Carcross area. It includes:

- a summary on the community and biophysical characteristics of the Carcross area;
- an overview of existing land use, land ownership and land tenure including a description of regulations which currently apply; and
- a discussion of key planning issues and opportunities considered during preparation of the Carcross LAP.

Part 2: Designations & Policy provides the planning framework to guide future land use in the Carcross area. It includes:

- an expression of community priorities in the form of a community vision statement and values descriptions, as well as overarching development principles to guide land use policy;
- overall land management objectives and policies as well as area-specific land use designations, objectives and policies;
- recommendations on action items required for plan implementation including measures to monitor and evaluate progress; and
- identification of issues that would trigger a plan review and potentially plan amendment.

1.4 ACKNOWLEDGEMENTS

The Carcross LAP could not have been completed without the support, time and effort of the host community. We would like to thank the residents of Carcross and surrounding area for the invaluable input provided through their participation in plan workshops and community surveys.

The Consultants also wish to thank the members of the Planning Committee for their thoughtful guidance and assistance thought the preparation of this plan. The Planning Committee included (in alphabetical order): Bill Barrett Sr., Janet Constable-Rushant, Corey Edzerza, Patrick James, Dan Kemble, Anne Morgan, Linda Pringle and Bob Truelson.

Technical assistance, as well as logistical and organizational support was provided through the unyielding efforts of Doris Dreyer (Government of Yukon, Land Planning Branch), Bill Barrett Jr. and Frank James (C/TFN, Department of Heritage, Lands and Natural Resources). Recognition must also be extended to Colleen James who participated as the Community Liaison during the plan preparation.

Finally, we would like to acknowledge the assistance of a number of staff people working in First Nation, Territorial and Federal Government department and agencies who provided the consultant team with information and comments about the planning area throughout the process.



PART 1: ANALYSIS



2.0 CARCROSS AREA CHARACTERISTICS

The Carcross Local Area Plan boundary is approximately 20.94 km² and is located within the Southern Lakes region of Yukon Territory, Canada. The planning area boundary includes the unincorporated community of Carcross, a historic settlement situated along Natasheeni² (also referred to as the Narrows) between Lake Bennett and Nares Lake. The local planning area boundary is shown on **Figure 1**.

The Carcross LAP is within the Traditional Territory of the Carcross/Tagish First Nation. C/TFN has several Settlement Land parcels within the planning boundary.

2.1 HISTORY³

The Carcross region is the Traditional Territory of the Inland Tlingit and Tagish peoples of the C/TFN. Archaeological evidence suggests that the area around Natasheeni has been occupied for thousands of years.

Carcross was known at the turn of the century as "Caribou Crossing," As the original name implies, there were many historical, geographic and cultural reasons for First Nation people to meet, reside and trade from this location. The site was an important hunting and fishing camp to Inland Tlingit and Tagish people, in particular during the spring herring fishery and the fall caribou migration.

In the early nineteenth century, the Tagish were active in trade with the Tlingit people on the coast and with other Athapaskan First Nations further inland. The Tagish intermarried with the coastal Tlingit, and by the mid-19th century Tagish and Tlingit traditions and cultures began to merge. Many of the Tagish/Tlingit people settled in and around Carcross and eventually formed the Carcross/Tagish First Nation.

A large orange rectangular box with rounded corners, positioned on the right side of the page. It serves as a placeholder for a future image.

Placeholder for
future image

² Tlingit name meaning *Sleeping Waters*.

³ Portions of the following description are reproduced from Halladay, P., & Dobrowolsky, H. (2008). *Summary of Carcross Heritage Sites*.

The Carcross/Tagish First Nation people lived off the land and used its resources to sustain their lives. Hunting, fishing, trapping, gathering traditional medicines and berries were – and still are – an important part of the First Nation’s lifestyle. Carcross/Tagish people traded with the coastal Tlingit, inland Kaska and Tutchone, and travelled on their well-established trading routes within the southern Yukon, Alaska and northern B.C., including the Chilkoot Trail. The First Nation developed a rich culture that draws on both its Tagish and Tlingit heritage and includes visual art, dance and oral tradition expressing spiritual relationships with the natural environment and society.

The discovery of gold in the Klondike in 1896 brought significant changes to the area and to the traditional way of life. During the 1896 Klondike Gold Rush, Carcross became an important stopover and supply centre for thousands of prospectors that headed to the gold fields along the main coastal route via Skagway. Upon completion of the White Pass & Yukon Route (WP&YR) narrow gauge railway in 1900 became settled by non-natives. WP&YR offered freight and passenger service between Skagway and Whitehorse. In the early 20th century, Carcross served as a staging and logistics site for several start up mining operations underway within the region. In 1901, the townsite of Carcross, then known as Caribou Crossing, was originally surveyed⁴. During World War II, Carcross became a staging camp for work on the Alaska Highway to the west and east of the community. The South Klondike Highway, opened in 1979, linked Carcross to Skagway by road. It dramatically altered settlement patterns and land use throughout the Carcross region, and led to the cessation of railway services between the two communities 3 years later. The new year-round highway connection also increased tourism throughout the Southern Lakes Region. Passenger service between Skagway and Carcross was re-instated in 2007 and today, Carcross receives more visitors each year than any other Yukon community. As a result, the community has largely been, and continues to be, shaped by external events and circumstances.

It is difficult to imagine how those who lived in Carcross before the Gold Rush must have felt with the sudden, overwhelming influx of new people. Virtually overnight their relationship to the land, which had sustained them for millennia, was disrupted. The changes affected their social and governance structures, their life styles and settlement patterns. First Nation members were slowly pushed off their lands valuable lands alongside Lake Bennett and relocated on reserve lands, such as Chootla subdivision.

Today, C/TFN is committed to preserving its culture, language and traditions, and incorporating cultural values and traditional governance systems based on clan structure into self-government. C/TFN is also exploring tourism development initiatives that build on and share the history, culture, knowledge and contributions of the First Nation. The settlement of the Carcross/Tagish First Nation Land Claim in May 2005 represents concrete change towards self-empowerment, resolution of past injustices and restoration of equity and balance between First Nation residents and others who now call Carcross home. The Local Area Plan planning process,

⁴ Plan 7556 LTO YT “Caribou Townsite at Upper Caribou Crossing” was surveyed by George White-Fraser. The survey plan was signed on May 20, 1901.

set out in the C/TFN Self-Government Agreement is structured to encourage the development of consensus around common values that lead to sustainable community development.

2.2 COMMUNITY PROFILE

The unincorporated community of Carcross is located 74 km south of Whitehorse on the South Klondike Highway. Carcross has a rich heritage influenced by the culture and history of Carcross/Tagish First Nation, the Klondike Gold Rush, and the development of transportation infrastructure and industry throughout the 20th century. Carcross is also an area of spectacular natural beauty and is well-recognized for its unique environmental features, including the Carcross Dunes & Desert, Lake Bennett Beach and Montana Mountain.

Carcross can be accessed either by the north-south oriented South Klondike Highway or by the east-west oriented Tagish Road, which connects Carcross with the community of Tagish and beyond to the Alaska Highway. WP&YR offers seasonal passenger rail service between Skagway and Carcross. The community also has a small aerodrome and offers access to the Southern Lakes system by boat.

The population of Carcross has been relatively stable over time, and was most recently reported at 423 by the Yukon Bureau of Statistics.⁵ 2011 Census data indicates that males are slightly over-represented in the population (57%) compared to females (43%).

The median age in Carcross is 43.2 years which is somewhat higher than the Yukon-wide median age of 39.1 years.⁶ This reflects the influx of people that wish to retire in this community.

Members of C/TFN comprise approximately half of the community population.⁷ While the overall population of the community has been stable, C/TFN membership has increased from 531 members in 2000 to 613 members in 2010. This is an increase of C/TFN membership of 10%. However, 60% of the members live off Settlement Lands, mostly outside of Carcross⁸. The main reasons for that include lack of housing, work and high school opportunities in Carcross.

Tourism is the primary industry in Carcross and many of the associated employment and business opportunities are seasonal in nature. Employment in the area is provided by government services (28%), health care (8%), education (8%), tourism-related services (5-10%), retail (8%), construction (8%) and transportation (10%).⁹ The local economy is bolstered by a

⁵ Yukon Bureau of Statistics. (2012). *Population Report June 2012*. Retrieved August 15, 2012, from http://www.eco.gov.yk.ca/stats/pdf/populationjun_2012.pdf

⁶ Statistics Canada. (2012). Carcross, Yukon (Code 6001048) and Yukon, Yukon (Code 6001) (table). Census Profile. 2011 Census. Statistics Canada Catalogue no. 98-316-XWE. Ottawa. Released May 29, 2012. <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E> (accessed August 15, 2012).

⁷ Statistics Canada. (2007). Carcross, Yukon Territory (Code6001048) (table). 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E> (accessed August 15, 2012).

⁸ Department of Indian Affairs and Northern Development. Registered Indian Population by Sex and Residence. <http://www.aadnc-aandc.gc.ca/eng/1100100016888/1100100016889>. (accessed January 07, 2013).

⁹ Yukon Environmental Planning. *Carcross Drinking Water System Upgrades and Water License Application*. 2010.

culture of entrepreneurship, self-employment and private enterprise. Some residents commute to Whitehorse for full-time employment. The absence of a year-round economy in Carcross remains a major obstacle towards local employment and business development.

Carcross offers a range of community facilities and services to its residents including a K-9 school, satellite community college, RCMP detachment, nursing station and EMS services. A variety of natural and manmade recreational amenities such as ski trails, mountain biking trails, hockey rink and seasonal swimming pool are also available.

Potable water is provided to most properties through trucked delivery, although some private wells remain in use. The Carcross Drinking Water System was recently upgraded to improve water treatment as well as to increase reservoir capacity. Water delivery service is offered 6 days a week. Sewage is disposed at the Carcross Wastewater Treatment Facility, a three-celled lined lagoon system located north of the town site. Education services are provided to local residents through private contractors and C/TFN. The recent renewal of water licenses for both the drinking water and wastewater treatment systems suggest that these service delivery systems will likely remain in place at least in the medium-term.

Residents are responsible for sorting and transporting household waste to the nearby Transfer Station. There is no formal recycling program in place within the community at this time.

Map 2 – Carcross Community Orientation Map provides a generalized overview to some of the major land use features presently existing within the community.

Map 1 - Carcross Community Orientation Map



2.3 BIOPHYSICAL ENVIRONMENT

2.3.1 Landscape Conditions

Carcross is located at the convergence of three ecoregions: the Yukon Stikine Highlands, the Yukon Southern Lakes, and the Boreal Mountains and Plateau. The landscape is characterized by its large lakes, broad valleys and numerous mountain peaks. The predominant water bodies around Carcross are Lake Bennett, Nares Lake and Natasheeni which links the two lakes. Notable peaks include Montana Mountain (7243 feet), Caribou Mountain (6906 feet) and Nares Mountain (5833 feet). Carcross has extensive sand dune habitat, including the Carcross Desert Territorial Park Reserve.

The surface deposits and geomorphology of the Carcross area are strongly associated with the McConnell Glaciation, which is believed to have covered the south and central Yukon between 26,500 and 10,000 years ago, as well as post-glacial fluvial processes associated with waters impounded behind retreating glaciers. Accordingly, the Carcross landscape is dominated by glacio-fluvial gravels overlain with lacustrine clays and silts. Soils are predominantly Eutric Brunisols overlying a variety of glacial parent materials, including scattered pockets of discontinuous permafrost.¹⁰

The climate of the Carcross region is characterized by short, warm summers and long, cold winters. Carcross lies in the rain shadow of the Coast Mountains, making it one of the driest parts of the Yukon. Annual precipitation varies between 200 and 325 mm annually, with 1/3 to 1/2 falling as rain. The area of the Carcross Desert lies in a small mountain rain shadow that receives less than 50 mm of rain per year. Carcross has major diurnal and seasonal temperature ranges and strong altitudinal temperature effects that vary with the seasons.¹¹

Carcross is part of the Yukon River Drainage system and receives water from the eastern-facing slopes of the Boundary Range. The Wheaton and Watson rivers are Lake Bennett's two main riverine inputs, both entering the lake on its northeast side. Additional hydrological inputs include secondary rivers and streams, snowmelt inputs during the spring melt period, and summer and fall precipitation. Annual stream flow is characterized by a rapid increase in discharge in May due to snowmelt in the valleys, and a peak discharge in July or August due to high elevation snowfield and glacier melt.

¹⁰ Florkiewicz, R., Maraj, R., Hegel, T., & Waterreus, M. (2007). The effects of human land use on the winter habitat of the recovering Carcross woodland caribou herd in suburban Yukon Territory, Canada. *Rangifer*, 181-197.

¹¹ Northern Climate ExChange. (2011). *Hydrology of the Bennett Lake Watershed: Contemporary Conditions and Potential Impacts of Climate Change*.

2.3.2 Vegetation

Carcross, like much of Yukon, is located within Canada's northern boreal forest. The vegetation surrounding Carcross reflects the lower precipitation in the area. It is typified by largely open coniferous and mixed woodland with lodge pole pine (*Pinus contorta*) as the dominant tree species. White spruce forest stands (*Picea glauca*) are scattered in lowland habitats and areas with high moisture such as flood plains. Subalpine fir (*Abies lasiocarpa*) is dominant in higher elevation forests. In these high elevation forests, feathermoss has high cover where the canopy is dense, and scrub-birch (*Betula glandulosa*) and lichen have high cover where the canopy is open.¹²

Vegetation specifically associated with the sand dune ecosystem includes: Baikal Sedge (*Carex sabulosa*), Siberian Aster (*Aster sibiricus*) and Yukon Lupine (*Lupinus kuschei*). Of particular note is Baikal Sedge, which was added in 2006 to Schedule 1 of the federal *Species at Risk Act* (SARA) where it was designated as “Threatened”. The approximate distribution of Baikal Sedge habitat is depicted in **Map 3 – Baikal Sedge Values within the Carcross LAP Planning Area**.

Other notable plants within the Carcross planning area include: fireweed (*Epilobium angustifolium*), wild rose (*Rosa acicularis*), *junipers*, *saxifrages*, *arnica*, and *penstemons*.

2.3.3 Fish & Wildlife

Characteristic wildlife species in the planning area include caribou, moose, grizzly bear, black bear, Dall's sheep, mountain goat, wolves, beaver, fox, hare, raven, rock and willow ptarmigan, and golden eagle. A summary of priority planning issues related to specific wildlife species is presented below. Important wildlife habitat areas are illustrated in **Map 3 – Key Wildlife Areas in the Carcross Region**.

Caribou – Woodland caribou are a valued species in the area and are listed as a species of “special concern” under SARA. The Southern Lakes Wildlife Coordinating Committee finalized a caribou management plan in January 2010. The plan identifies the following caribou management goal: “To increase the size of the Southern Lakes caribou herds and to protect habitat over the long term.” The Carcross LAP overlaps with the winter range of the Carcross Caribou herd.

Moose – Moose are a valued species in the area and are of local conservation concern. Reducing mortality is the main issue for moose. While no key habitat has been identified within the planning area, suitable habitat for moose browsing occurs throughout. Moose mortality is primarily a wildlife management issue and cannot be directly addressed through the Carcross LAP.

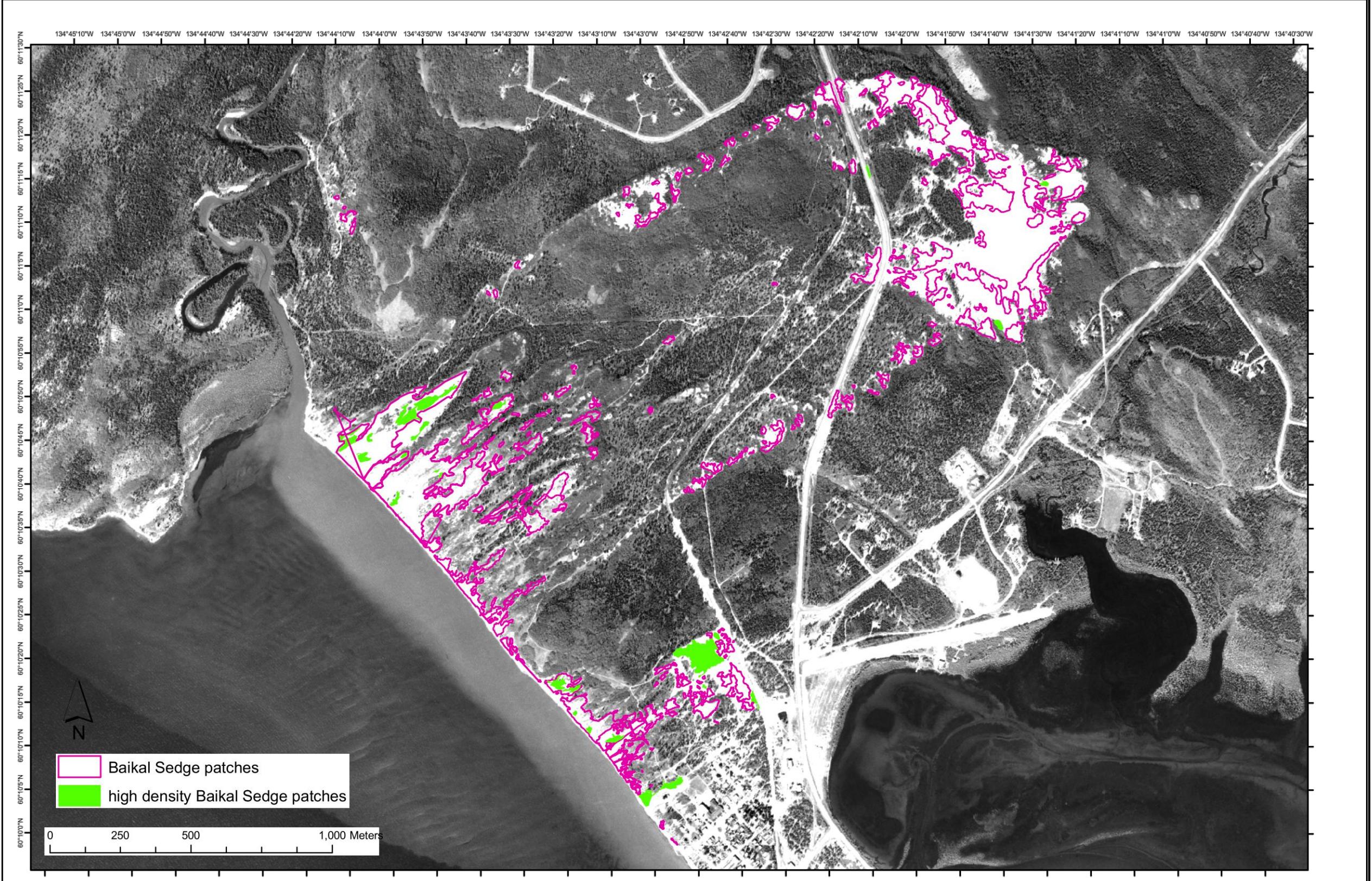
¹² Ecological Logistics & Research Ltd. (2010). *Carcross Wastewater Water License Renewal & Upgrades*.

Grizzly Bear - Mortality is the main issue limiting bear abundance in the Southern Lakes region. Avoiding future mortality of bears is a key issue. The greatest threat to bears and humans remains poor waste management procedures. Bear-human interactions are primarily a wildlife management issue and cannot be directly addressed through the Carcross LAP. Planning initiatives such as maintaining a compact community development form, preserving undisturbed open space and wildlife movement corridors to reduce human contact can partially mitigate some impacts. Converting the existing landfill to a waste transfer station is an example of a positive step to reduce bear mortality and increase public safety.

Invertebrates - The Carcross area contains an active sand dune habitat that is home to several insect species that are rare and of conservation concern. Ten or more species present in the Carcross Dunes are found in few other places on earth including 6 species of invertebrates whose known global distribution has only been documented to date in the Carcross dunes, and 3 species that are restricted to two or more Beringian dune fields. Representative species include: the Coast Dart Moth (*Euxoa cursoria*), the Dune Tachinid Fly (*Germaria angustata*), and various moth species in the genus *Gnorimoschema* in the sub-family *Gelechiidae*.

Migratory Bird Staging Areas - Natasheeni and the north-western section of Nares Lake, where open water exists in early spring, are known staging areas for migratory birds. Swans, ducks and other birds use this area during their migration. The same area is used in the summer by Bald Eagles for reproductive purposes. The location of these staging areas is illustrated on **Map 4 – Key Wildlife Areas in the Carcross Region**.

Fisheries - The Carcross Local Planning Area contains several fish bearing lakes and watercourses. Existing information on the fisheries resources within the planning area is limited. It is summarized in **Map 5 –Wetland & Fisheries Values within the Carcross Local Area Plan**. Fish species found in Lake Bennett include lake trout, lake (humpback) whitefish, northern pike, round whitefish, longnose sucker, burbot, least cisco and arctic grayling. Arctic grayling and longnose sucker use the lower portion of Choutla Creek (below the most downstream dam) for spawning during the month of April and May. In addition, the presence of emergent fish (thought to be lake trout and lake chub) captured in late June along the bank of Natasheeni strongly suggests that spawning takes place in the vicinity. Although spawning activities have not been documented in the adjacent shorelines of Lake Bennett and Nares Lake, it is possible that spawning may occur in these areas (where suitable habitat exists). Maintaining water quality and riparian vegetation will protect fish values in the planning area.



CARCROSS LOCAL AREA PLAN

MAP 2- BAIKAL SEDGE VALUES

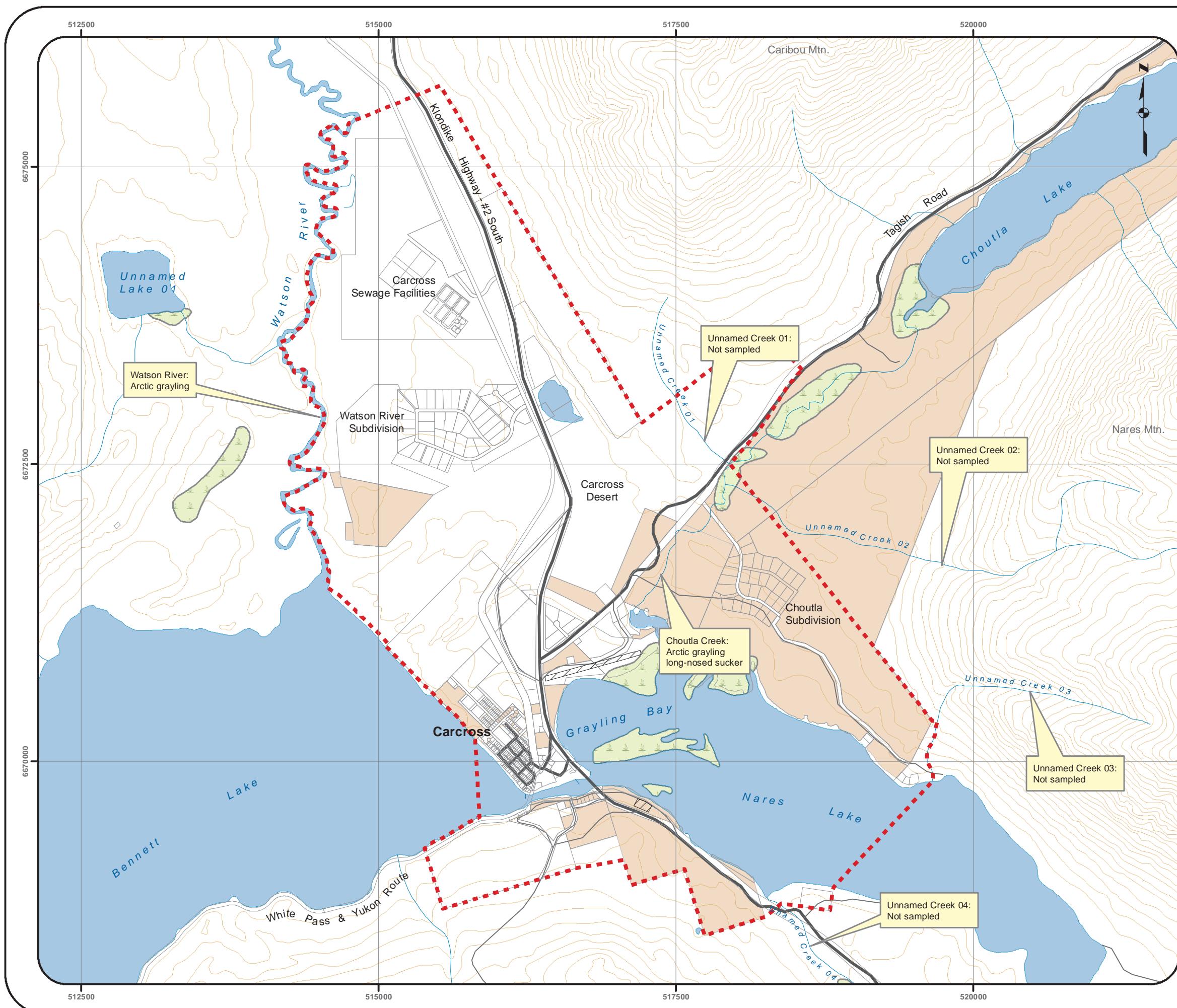
	Datum/Projection:
	Project No.:
	EMR 11-02

Please Note:

This information should be considered draft only and is not in its final form. The information should not be assumed to be complete or comprehensive (e.g. future areas identified as critical habitat could conceivably fall outside of the currently mapped areas)

For information on action planning and the implications of critical habitat identification, refer to the current version of the *Species at Risk Act* and the SARA guides accessible from the SARA public registry: http://www.sararegistry.gc.ca/approach/act/default_e.cfm

**Placeholder for
map being updated
on request**



- LEGEND**
- - - Carcross Local Land Use Plan Boundary
 - Limited-use road
 - Road
 - Trail
 - Topographical Contour
 - Watercourse
 - Land Parcel and Disposition
 - Carcross Tagish First Nation Settlement Land
 - Baikal Sedge
 - Waterbody
 - Wetland

Major waterbodies in the region including Bennett Lake, Nares Lake and the Natasheen/Nares River have several documented fish species consisting of: Arctic grayling, burbot, slimy sculpin, lake trout, lake chub, northern pike, least cisco, round whitefish and lake whitefish.

Presence of fish species was researched and collected from Dept. of Fisheries and Oceans (derived from FISS). The information is regarded as an indication only and is not considered to be a full compliment of data.

The Baikal sedge (*carex sabulosa*) shapefile shows the known and previously reported patches in the vicinity of Carcross, as mapped by the Yukon Conservation Data Centre. The majority of patches were delineated in the field in 2009 using a GPS at 10m accuracy or better. However, the patches within the townsite and to the northwest of townsite have not undergone fine scale mapping and as such are based solely on delineating sand patches as visible on a 0.5m orthophoto.

CARCROSS LOCAL AREA PLAN

MAP 4 - FISHERIES & WETLAND VALUES

Drawn:	Datum/Projection:
M. Power	NAD 1983 UTM Zone 8N
Checked:	EDI Project No.:
M. Setterington, I. Robertson	11-Y-0091
Date:	Data Sources:
6/8/2011	Refer to References Sheet

INUUKSHUK PLANNING & DEVELOPMENT LTD.



3.0 LAND USE & TENURE

Existing land use has a significant influence on long-term land planning. Existing land tenure, ownership and the location of key properties will shape future development patterns and may impose land use constraints on future options. The following section examines current land use, disposition and ownership patterns and discusses some of the implications for local area planning.

Information for this section was compiled from numerous secondary sources, including zoning and land disposition data from YG Land Management and Land Planning branches, relevant Geomatics Yukon datasets and ownership records from the Land Titles Office.

3.1 EXISTING LAND USE

Community land use is generally restricted to the valley floors constrained by the presence of lakes, topography, general geography and the presence of unique natural features such as the Carcross Dunes. The planning area is currently governed by the *Carcross General Development Regulations* (C.O. 1976/231). Originally passed in 1976, there have been numerous subsequent amendments since that time. Once the LAP has been completed, new area development regulations will be developed to reflect the direction of the LAP.

Table 1 describes land use by zoning designation within the Carcross LAP planning area. This information is also illustrated on **Map 6 - Land Use according to Current Zoning**. It is important to note that while zoning designations serve as an indicator of intended land use, there are numerous inconsistencies between the applied zoning with the actual use of the land. Text descriptions of existing land use are presented in the sub-sections that follow.

Table 1 - Land Use according to Current Zoning

Land Use Zone	Land Designation	Area (ha)	% of Total
R-1	Residential	25.3	1.21%
R-2	Country Residential	42.5	2.03%
WR-1	Watson River Residential	57.4	2.74%
I	Institutional	11.5	0.55%
M	Industrial	17.3	0.83%
P	Parkland/Greenbelt	27.9	1.33%
C1	Commercial	94.8	4.53%
C3	Highway Commercial	17.6	0.84%
C4, C4x1 & CMU	Tourist Commercial	23.8	1.13%
H	Hinterland	1,398.3	66.77%
N/A	Water surface area	≈377.8	18.04%

Source: Carcross General Development Regulations, C.O. 1976/231

3.1.1 Residential

The total combined land area which is currently designated for residential use, including Residential (R-1), Country Residential (R-2), and Watson River Residential (WR-1), is 125.2 ha or 5.98% of the planning area. The difference between these zoning categories include:

- difference in lot sizes;
- variety of housing forms (duplexes and/or multiple-unit dwellings are only permitted under the R-1 zone); and
- allowance for home-based businesses (only permitted under the R-2 and WR-1 zones).

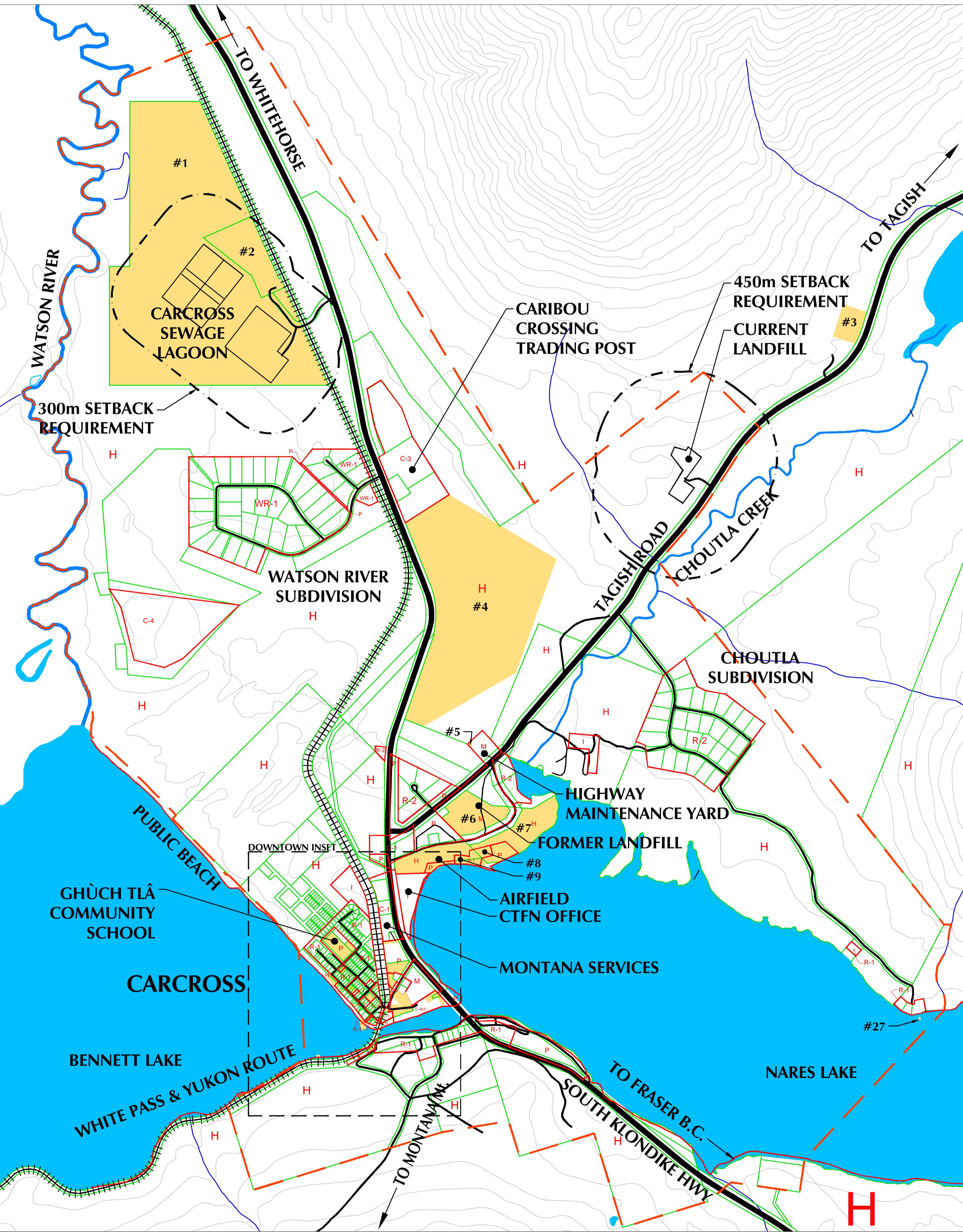
Residential development is concentrated in 5 nodes: Carcross Townsite, Watson River Subdivision, Choutla Subdivision, Carcross South/Natasheeni Drive and at the intersection of Klondike Highway/Tagish Road. The predominant housing form regardless of the zoning category is single-family housing.

Carcross Townsite is the primary residential neighbourhood within the planning area. This includes all residential parcels between the Lake Bennett waterfront and the WP&YR railway Right-of-Way. It also includes a number of residential buildings with identified heritage values. There are a few undeveloped surveyed parcels within the built-up area which present infill opportunities. Some of these lots are owned privately, others by C/TFN and YG.

Watson River Subdivision is a country residential subdivision located northwest of the main community with access provided off the South Klondike Highway. Land tenure is a mixture of privately-owned lots and C/TFN Settlement parcels. Infill opportunities exist on several of the undeveloped C/TFN land selections within this area. Further, there are two large undeveloped parcels that abut the subdivision.

Choutla Subdivision is a country residential subdivision located northeast of the downtown core with access provided at two points off the Tagish Road. Almost the entire subdivision area is C/TFN Settlement Land with the exception of a few privately-owned residential parcels at the eastern edge along the shoreline of Nares Lake. There are several unsurveyed non-conforming residential lots interspersed throughout the area, primarily within C/TFN parcel C-17B. The subdivision is not fully developed and there is opportunity to expand beyond the present surveyed subdivision boundary.

Carcross South/Natasheeni Drive consists of a strip of residential dwellings along the southern shorelines of Lake Bennett, Natasheeni Narrows and Nares Lake as well as several residential dwellings along Natasheeni Drive, the location of the former Carcross Indian Reserve #4. Dwellings along Natasheeni are unsurveyed and currently non-conforming. While mostly consisting of Settlement Land, there are a couple of privately owned parcels as well as one YG lease parcel in the north-west corner of this area. A number of residential buildings along the Narrows have identified heritage values.

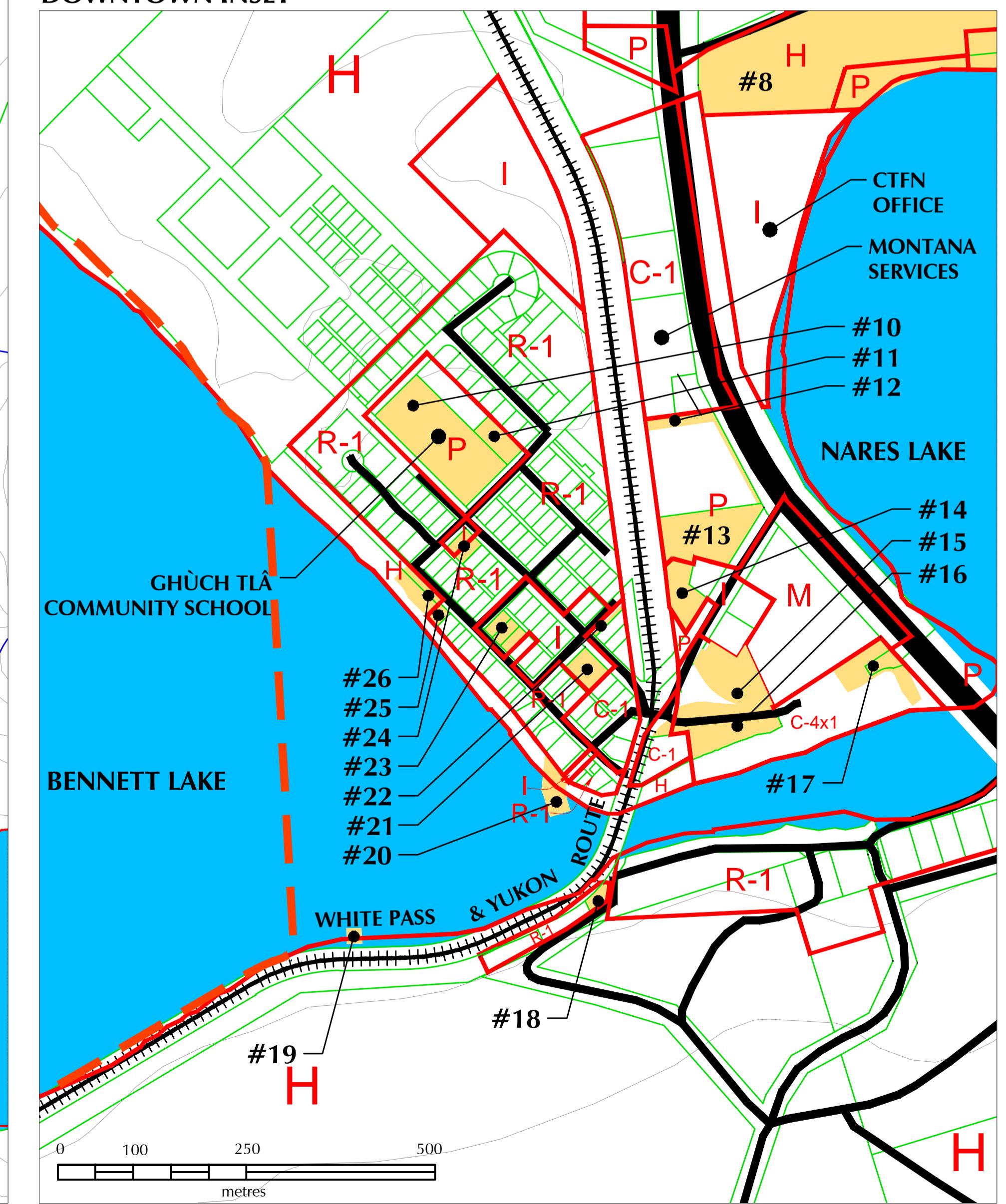


LEGEND:

Land Tenure Disposition		
Number	Type	Purpose
#1	Reservation	Garbage Dump GOVERNMENT
#2	Lease	Recreational PRIVATE - CARCROSS ROD & GUN CLUB
#3	Reservation	Gravel Pit GOVERNMENT
#4	Reservation	Parks & Campground GOVERNMENT
#5	Reservation	Utility GOVERNMENT
#6	Reservation	Garbage Dump GOVERNMENT
#7	Reservation	Airport GOVERNMENT
#8	Lease	Residential PRIVATE
#9	Lease	Residential PRIVATE
#10	Reservation	Institutional GOVERNMENT
#11	Reservation	Recreational GOVERNMENT
#12	Easement	Utility PRIVATE - THE YUKON ELECTRICAL CO. LTD.
#13	Reservation	Recreational GOVERNMENT
#14	Reservation	Recreational GOVERNMENT
#15	Lease	Commercial C/TFN MANAGEMENT CORPORATION
#16	Reservation	Heritage GOVERNMENT
#17	Reservation	Marine GOVERNMENT
#18	Lease	Recreational PRIVATE
#19	Reservation	Utility GOVERNMENT
#20	Reservation	Bridgehead GOVERNMENT
#21	Reservation	Institutional GOVERNMENT
#22	Lease	Residential PRIVATE, PRIVATE - KEHOE HOLDINGS INC.
#23	Reservation	Recreational GOVERNMENT
#24	Reservation	Institutional GOVERNMENT
#25	Reservation	Heritage GOVERNMENT
#26	Reservation	Public Use GOVERNMENT
#27	Lease	Marine PRIVATE

R-1	RESIDENTIAL	25.3ha	1.21%
R-2	COUNTRY RESIDENTIAL	42.5ha	2.03%
WR-1	WATSON RIVER RESIDENTIAL	57.4ha	2.74%
I	INSTITUTIONAL	11.5ha	0.55%
M	INDUSTRIAL	17.3ha	0.83%
P	PARKLAND - GREENBELT	27.9ha	1.33%
C1	COMMERCIAL	94.8ha	4.53%
C3	HIGHWAY COMMERCIAL	17.6ha	0.84%
C4	TOURIST COMMERCIAL	23.8ha	1.13%
H	HINTERLAND	1398.3ha	66.77%
WATER SURFACE AREA		≈377.8ha	18.04%

DOWNTOWN INSET



0	250	500	1,000
metres			
CARCROSS LOCAL AREA PLAN			
MAP 5 - EXISTING LAND USE			
Drawn: PP, RN	Datum/Projection: NAD 1983 UTM Zone 8N		
Checked: IR	Project No.: TMR 11-02		
Date: 08/31/2012			
INUKSHUK PLANNING & DEVELOPMENT LTD			

1301 Project 5851 Fig 5.5 Existing Land Use Planning ESR-12082012092127.mxd



The intersection of **Klondike Highway / Tagish Road** contains a small number of country residential lots. Additionally, a small number of non-conforming, unsurveyed single-family dwellings are scattered along the north side of the Tagish Road.

3.1.2 *Commercial*

The total combined land area which is currently designated for commercial uses, including Commercial (C-1), Highway Commercial (C-3), and Tourist Commercial (C-4, C-4x1 and CMU), is 136.2 ha or 6.50% of the planning area.

Commercial uses are mainly concentrated in the downtown core; Montana Services and Caribou Crossing Trading Post are notable exceptions located along the South Klondike Highway.

Commercial land uses in the downtown core include the historic Caribou Hotel and Matthew Watson General Store, as well as a variety of other small businesses that are of seasonal nature and dependent on tourist traffic. Downtown commercial uses also include a number of tourism-related support facilities, including the WP&YR Depot and the Visitor Information Centre.

C/TFN has a large undeveloped Settlement parcel southwest of the Watson River Subdivision which is zoned (C-4) *Tourism Commercial* in anticipation of a possible resort development project.

3.1.3 *Institutional*

Institutional land uses comprise 11.5 ha or 0.55% of the planning area. Carcross offers a number of community facilities and essential services to its residents. These land uses are generally zoned institutional, with the notable exception of Ghùch Tlâ Community School which is currently zoned Parkland-Greenbelt.

Institutionally-zoned community facilities and amenities which are offered in Carcross include:

- Yukon College Community Campus
- Nursing Station
- EMS Service Station & Fire hall
- Anglican Church
- Pentecostal Church
- Community Club
- RCMP detachment
- Public library
- C/TFN Administration Building
- C/TFN Daycare

3.1.4 *Parks & Open Space*

Only 27.9 ha or 1.33% of the planning area are currently zoned for Parkland/Greenbelt. Notable areas where this zone has been applied include the existing cemetery, Ghùch Tlâ Community School, the campground, as well as some shoreline around Grayling Bay / Nares Lake.

Significant lands within the planning area are currently zoned Hinterland - 1,399 ha or 66.8% of the planning area. In practical terms this is a “catch all” open-space designation applied liberally to lands with no pre-determined purpose, most Settlement Lands, as well as environmentally sensitive lands including the Carcross Dunes & Desert. The majority of recreational land uses, including the ski trails which spread out from the school through undeveloped lands northwest of downtown, are currently on Hinterland zoned lands.

3.1.5 *Industrial*

Industrial use zones comprise 17.3 ha or 0.83% of the planning area. The WP&YR train tracks and shed are prominent industrial land uses within the downtown area. Other industrial uses include the former landfill and the YG Highways and Public Works, Grader Station. Some industrial type uses are scattered through the community as secondary uses on residential lots.

C/TFN presently utilizes the land immediately north-east of the Grader Station for industrial purposes, although this is not captured in the existing zoning. Neither the Carcross Sewage Lagoon nor the Transfer Station are currently zoned for industrial use.

3.2 LAND TENURE

Commissioner’s Lands within the planning area including the crown reserve above the ordinary high water mark (OHWM) is administered by YG Energy, Mines and Resources. The department may dispose of land for residential, commercial, industrial or other purposes (e.g., agriculture) in accordance with criteria laid out in their land disposition policies. Private individuals may hold land tenure through fee simple title, land leases and licenses of occupation. YG may also reserve a parcel of land on behalf of a government department for a specific use such as firehall, community centre, aggregate extraction, etc.

C/TFN is responsible for the allocation and disposition of rights and interests on C/TFN Settlement Lands including those lands within the Carcross LAP boundary.

C/TFN may dispose of lands for residential, commercial, industrial, agricultural and recreational purposes to both C/TFN citizens and non-citizens according to *C/TFN Land Management Policy*. A salient distinction between YG-administered and C/TFN-administered lands is that fee simple title cannot be granted upon Settlement Lands at this time.

Table 2 lists the land dispositions within the plan boundary on record with YG Land Management Branch. This information is also illustrated on **Map 6 - Land Use according to Current Zoning**. The majority are typical land reservations for specific uses required by government.

Table 2 - Land Tenure

Number	Type	Purpose	Client Name
#1	Reservation	Garbage Dump	Yukon Government
#2	Lease	Recreational	Private
#3	Reservation	Gravel Pit	Yukon Government
#4	Reservation	Parks & Campground	Yukon Government
#5	Reservation	Utility	Yukon Government
#6	Reservation	Garbage Dump	Yukon Government
#7	Reservation	Airport	Yukon Government
#8	Lease	Residential	Private
#9	Lease	Residential	Private
#10	Reservation	Institutional	Yukon Government
#11	Reservation	Recreational	Yukon Government
#12	Easement	Utility	Private
#13	Reservation	Recreational	Yukon Government
#14	Reservation	Recreational	Yukon Government
#15	Lease	Commercial	Private
#16	Reservation	Heritage	Yukon Government
#17	Reservation	Marine	Yukon Government
#18	Lease	Recreational	Private
#19	Reservation	Utility	Yukon Government
#20	Reservation	Bridgehead	Yukon Government
#21	Reservation	Institutional	Yukon Government
#22	Lease	Residential	Private
#23	Reservation	Recreational	Yukon Government
#24	Reservation	Institutional	Yukon Government
#25	Reservation	Heritage	Yukon Government
#26	Reservation	Public Use	Yukon Government
#27	Lease	Marine	Private

Source: YG Lands Branch

3.3 LAND OWNERSHIP

The three major land owners are YG C/TFN and WP&YR. Collectively, these three property owners control 87% of the land within the planning boundary. WP&YR is distinguished from other private land owners given their extensive land holdings within the downtown and Carcross South area that directly impact future community growth.

Lands owned by YG include lands reserved for specific purposes (e.g., sewage lagoon, highways compound, Carcross Desert, etc.) as well as lands for which no purpose has been defined or the development potential has not been assessed. Most C/TFN Settlement lands were selected through the land claims process with fairly specific intentions in mind. WP&YR lands include those used to support their railway and former sternwheeler boat operations, as well as land

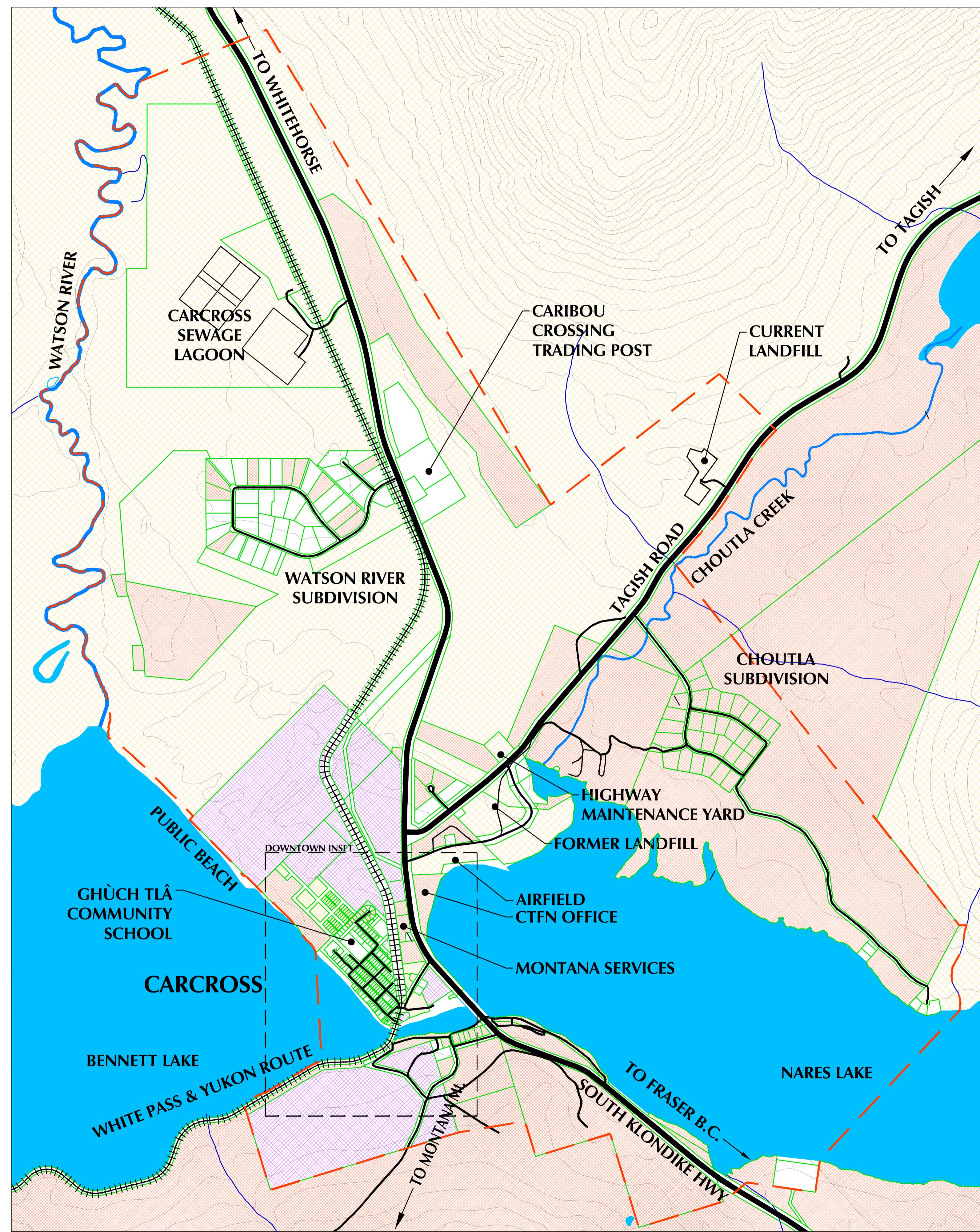
acquired through the original town survey process. The majority of these lands within the planning area are undeveloped without apparent development purpose or intent.

Table 3 summarizes the main land ownership within the LAP boundary. This information is also illustrated on **Map 7 – Main Land Ownership**.

Table 3 – Main Land Ownership

Main Land Ownership	Area (ha)	% of Total Gross Area	% of Total Net Area
Government of Yukon	852.3	40.7%	49.7%
Carcross/Tagish First Nation	483.9	23.1%	28.2%
WP&YR/ British Yukon Railway properties	157.5	7.5%	9.2%
Private/miscellaneous	222.7	10.6%	13.0%
Water surface area	377.8	18.0%	N/A
Total gross area within LAP boundary	2,094.2	100%	100%

Source: YG Lands Titles Office



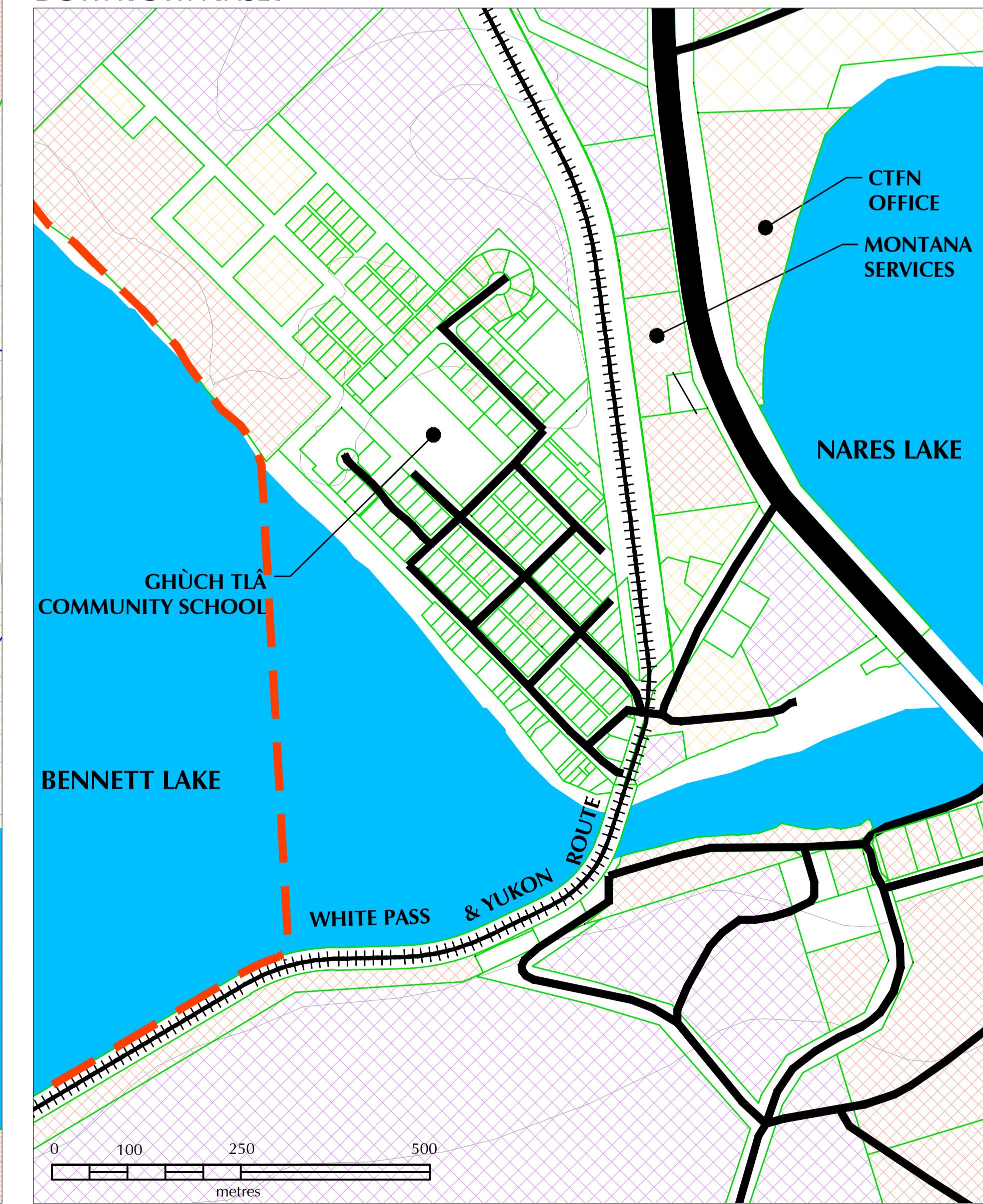
LEGEND:

-	LOCAL AREA PLANNING BOUNDARY:	$\approx 2094.2\text{ha}$	100%
■	YUKON LAND:	$\approx 852.3\text{ha}$	40.7%
■	CARCROSS/TAGISH FIRST NATION LAND:	$\approx 483.9\text{ha}$	23.1%
■	WHITE PASS & YUKON ROUTE / BRITISH YUKON RAILWAY PROPERTIES:	$\approx 157.5\text{ha}$	7.5%
■	PRIVATE/MISCELLANEOUS:	$\approx 222.7\text{ha}$	10.6%
■	WATER SURFACE AREA:	$\approx 377.8\text{ha}$	18.0%



0 250 500 1,000
metres

DOWNTOWN INSET



CARCROSS LOCAL AREA PLAN

MAP 6 - MAIN LAND OWNERSHIP

Drawn:	PP, RN	Datum/Projection:	NAD 1983 UTM Zone 8N
Checked:	IR	Project No.:	TMR 11-02
Date:	08/31/2012		

INUKSHUK PLANNING & DEVELOPMENT LTD



4.0 PLANNING ISSUES & OPPORTUNITIES

Development of the Carcross LAP requires consideration of a number of planning issues and opportunities. Key planning issues and their implications for local area planning are described in some detail in the sub-sections that follow and are illustrated in **Map 9 - Issues, Concerns and Opportunities** at the end of this section.

4.1 SUSTAINABLE DEVELOPMENT

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”¹³

The principle of sustainable development envisions a holistic approach to planning and community development that integrates environmental, social and economic values and needs of today without compromising future choices.

For the purposes of the Carcross LAP, the concept of sustainable development will refer primarily to the building of communities that maximize the efficient use of space, energy, and resources. Sustainable development also involves meeting the basic needs of all community members, for example, by providing a variety of housing options, styles and forms. Further, it is about encouraging self-sufficiency and local decision-making that takes into account the size and present realities of community life as well as their desires and expectations for the future as expressed in the community vision statement.

Sustainability objectives for the community that can be drawn out of the LAP vision statement include: a desire for economic diversification and increasing local employment opportunities, promoting self-sufficiency to the extent possible, preserving the heritage character and the unique qualities of the community, encouraging environmental stewardship, and promoting health, wellness and community unity.

Considerations:

- All these objectives are interrelated and involve trade-offs in terms of priority, timing, implementation sequencing and commitment to action. All have connections to land use planning choices but are not necessarily matters that are within the scope of a local area plan. Municipal governance is an example. As an unincorporated community, Carcross does not have the same powers or decision-making responsibilities of a municipal government. This has advantages and disadvantages when the objective is increased self-determination.

¹³ World Commission on Environment and Development. *Our Common Future*. Oxford: Oxford University Press. 1987

- The community's geographic location presents constraints and opportunities for economic diversification that are unlike of other similar-sized Yukon communities. For example, more than 100,000 visitors pass through the community every summer. However, as the stay of most of these visitors is counted by hours, the number of visits has not yet translated into the development of thriving tourism sector. In order to take advantage of its tourism potential, the community needs to promote more visitor activities, services and accommodations
- That said, Carcross residents have been very clear – they do not want to become another Skagway. Instead, they want to preserve the community's small-town feel, its heritage character and unique natural attributes such as the beach and dunes system.

4.2 COMMUNITY GROWTH

In their vision for Carcross' future, youth expressed their wish for more people to live and visit Carcross. The youth is looking for more business, recreational and entertainment opportunities. Meanwhile, there are no residential or commercial properties on the market for people that would like to move to Carcross and/or to open business. This need for developable land has been recognized by community residents who are caught between a desire for growth and economic diversification and the desire to preserve the community's small size and unique character.

From March 1990 to June 2012, Carcross grew from roughly 340 to 423 residents, an average annual population increase of 1.1%. While this may be considered a fairly steady growth rate, in reality much of this change may attributable to the development of the Watson River subdivision in the early 1990's. To illustrate, since March 2000 average annual growth has been a mere 0.06%.¹⁴

However, there is evidence to suggest that "natural" population growth in Carcross may be stifled by a number of internal and external factors, including, but not limited to:

- **Lack of Land Availability** – There is a deficit of developable Commissioner's Land in the community. Both C/TFN and White Pass control strategic land parcels which have yet to be developed;
- **Existing Land Use Patterns** - Which are influenced by the current type of servicing (trucked water and sewage eduction), location of the highway and railway rights of ways, sewage lagoon, transfer station, etc.
- **Physical room to grow** – The community's basic valley geography, sandwiched between two large lakes and adjacent mountains, as well as the unique qualities of the Carcross

¹⁴ Yukon Bureau of Statistics. (2012). *Demographics*. Retrieved August 27, 2012, from <http://www.eco.gov.yk.ca/stats/demographics.html>

- dunes leaves few choices and all options involve substantive conflicts and value trade-offs.
- **Seasonal Economy** – The local economy has neither evolved nor diversified enough to support a larger population base; and
 - **Seasonal Residents** – A number of properties in Carcross are owned by individuals whose permanent residence is elsewhere and who, consequently, are not captured in the population estimate.

There is also evidence to suggest that future market demand for land in the Carcross area may be greater than the population trends suggest. YG Land Management Branch sold the last Commissioner's land available for residential development in Carcross in 2005. Since 2006, the Yukon has experienced the highest population growth in all of Canada. This increase has been driven by high economic growth, primarily through a boom in mining exploration activities and associated support services, as well as the development of several new operational mines in the territory. While most of the population growth has been centralized around Whitehorse, there are increasing development pressures for recreational and retirement properties within commuting distance to Whitehorse.

The nearby unincorporated communities of Tagish and Marsh Lake have experienced rapid growth in recent years, among the highest for all Yukon communities including Whitehorse, which can be attributed to a significant increase of changing former recreational properties to year-round residences. It is foreseeable that with availability of residential properties in Carcross, its population growth rates will exceed historical averages.

The current Yukon Bureau of Statistics Population Projection suggests that a reasonable annual average growth rate for Carcross may range from 1.0% to 1.6% annually.¹⁵ Based on these figures, **Table 4** presents two population growth scenarios for Carcross until 2030. These data suggest that the Carcross population may expand by 80 to 140 new residents during the lifetime of the plan, equating to an overall demand of roughly 40 to 70 new lots at 2.1 persons per household.

Table 4 – Carcross Population Projection Scenarios 2012-2030.

Growth Scenario	2012	2020	2030	20 year Population Change
Medium (1.0% per year)	423	458	505	+82
High (1.6% per year)	423	481	565	+142

Source: Yukon Bureau of Statistics 2012

¹⁵ Yukon Bureau of Statistics. (2012). *Population Projections 2021*. Retrieved August 27, 2012, from <http://www.eco.gov.yk.ca/stats/pdf/Projections2011.pdf>

Considerations:

- Sufficient residential land needs to be identified to accommodate at least 500 to 600 total residents by 2030.
- Sufficient land does exist within the community to meet this demand through redevelopment of underutilized lots, infill densification, relocation of some land uses and other densification strategies. The current piecemeal approach, concentrated land ownership in a few hands and lack of lots available for over the counter sales undermine opportunities to meet such demand in an orderly and cost efficient manner.
- The pace, scale and nature of future residential development poses servicing challenges, value trade-offs, and difficult choices on how such growth will be managed to the benefit of the community as a whole.
- Each of the three main property owners has underutilized lands with development potential. For the community to grow, each of these property owners will have a role to play in meeting future community needs through development or redevelopment of their property assets. A coordinated, comprehensive approach is required that may include consolidation and re-subdivision of lots that exist in legal survey form but have not been developed, consideration of land swaps, level of service standards, etc..
- The issue of housing affordability is influenced by land availability, land suitability, construction costs, local market conditions and the nature of housing need taking into account the population profile. Price, housing form and availability, as well as rental and ownership options are all factors to be considered carefully along with the appropriate regulatory environment to encourage a housing mix consistent with community needs.
- Results from the *Community Feedback Form* indicate:
 - Support for new residential development in the Choutla and Watson River subdivision areas is 69.3% and 65.0% of community members respectively;
 - Only 34.2% of community members support downtown townsite expansion beyond the built up area to create additional urban lots. The lower level of support reflects differing resident views of potential impacts on the ecologically sensitive dune ecosystems, the trail system radiating out from the school and concerns about public access to and along Lake Bennett Beach.

4.3 ENVIRONMENTAL VALUES

Environmental stewardship is a key component of the Carcross community vision. The stewardship ethic extends to all elements of the Carcross LAP. Of particular relevance to the planning process are the:

- management and conservation of the Carcross Dunes and Carcross Desert Territorial Park Reserve,
- protection of rare flora and fauna (e.g., Baikal Sedge),
- community's susceptibility to flooding and shoreline erosion,
- protection of wetlands and
- management of recreational uses (e.g., trail system).

Carcross Dunes

The Carcross Dune ecosystem stretches along the Lake Bennett waterfront and to the mouth of the Watson River and extends northeast through the Carcross Desert to a low ridge at the base of Caribou Mountain. It is one of the community's most important assets.

Carcross Desert was recognized during the 1970's as an ecological site of international significance¹⁶ and is currently protected as the Carcross Desert Territorial Park Reserve.

Dune ecosystems are dynamic in nature, requiring constant disturbance from winds and continuous inputs of sand and silt in order to remain unstable or "active". The most active areas of the dunes are characterized by little or no vegetation and are found near the waterfronts (Lake Bennett Beach) and at higher elevations on exposed ridges (Carcross Desert). In the spring, low water levels expose the sand deposits and prevailing winds push the sand onto the beach and blow it into the dunes. As the windblown sands from the active dunes migrate inland to less exposed areas, vegetative communities are established and, through succession, portions of the dunes will become more stable over time.

While vegetative succession and dune stabilization are naturally occurring processes, they can also be threats to ecosystem health if not properly balanced by depositional and wind-based disturbance processes occurring in the active dunes. Efforts made to stabilize portions of the active dunes, for example to permit land development, may disrupt these processes resulting in accelerated rates of vegetative encroachment and contribute to dune stabilization. Semi-stable and stable areas of the dune system may be less sensitive to land development impacts.

Considerations:

- Formal protection of the dunes ecosystem is limited to the Carcross Desert Territorial Park Reserve, located on the eastern side of the South Klondike Highway. Past efforts to establish and manage a Territorial Park in this area have been cancelled due to local opposition.
- The larger dunes system located on the western side of the highway is not protected and includes public and private lands. A large park reserve was established in this area during the 1980s but was cancelled shortly thereafter for reasons which are now unclear.

¹⁶ Canadian Committee of the International Biological Programme. (1975). *Areas Recommended as Ecological Sites in Region 10, Yukon and Northwest Territories Boreal Forest to the Treeline*. University of Lethbridge.

- All forms of land use occurring in the dunes ecosystem have some adverse impacts and may require mitigation measures.
- Land development poses concerns, particularly along the Lake Bennett Beach in the active dune system as they are sensitive to disturbance.
- The Bennett Lake Beach adjacent to the existing downtown, is desirable future development land as it offers direct waterfront access with easy access to community amenities and institutions.
- Suitable trade-offs will be required to balance environmental stewardship responsibility with community development needs. Stewardship of the dune system may require specific development guidelines that aim to protect the physical and biological dunes environment. Other land management interventions may include land swaps or purchase to encourage alternative development opportunities.

Baikal Sedge

The Carcross Dunes are inhabited by several rare and/or endemic invertebrate and plant species, including most notably the Baikal Sedge. Baikal Sedge is a colonizing plant species which requires active, shifting sand dunes, 0.5-4.0m depth of loose sand, and a relatively large area to accommodate continual renewal¹⁷.

Baikal Sedge is known to exist in only 15 locations in North America, 14 of which are in the Yukon. The Carcross dune system is the largest unprotected sedge habitat in the Yukon and susceptible to human disturbance as well as natural changes. The biggest threats to the health of sedge populations include: (1) the establishment of invasive species (e.g., Altai Wild Rye) which out-compete the sedge; (2) excessive motorized recreational use in the active dunes that inhibits the growth of vegetation; and (3) land development on active dune areas that stabilizes the beach to a point that it inhibits the travel of loose sand.

Baikal Sedge is currently designated as Threatened under SARA. Inventory work completed since the 2005 assessment has shown there are nearly three times as many populations in Canada as originally thought¹⁸. Hence, despite its current designation, Baikal Sedge no longer meets the COSEWIC criteria of a threatened species. According to present data, Baikal Sedge may be down-listed from ‘Threatened’ to ‘Species of Special Concern’ at the next reevaluation of SARA considered species.

¹⁷ Environment Canada. (2012). http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2313. (Accessed January 07, 2013).

¹⁸ COSEWIC. (2005). Assessment and Status Report on Baikal Sedge (*Carex sabulosa*). Committee on the Status of Endangered Wildlife in Canada. Ottawa.

A *Recovery Strategy for the Baikal Sedge*¹⁹ was published by Environment Canada in 2011. The document includes several broad strategies for species recovery, including:

- additional research to document and analyze disturbance impacts of recreational activities as well as the long-term impacts of natural processes on the viability of sedge populations in Yukon;
- inclusion of Baikal Sedge considerations in land planning initiatives;
- invasive species monitoring and management; and
- additional surveying and mapping to determine Critical Habitat²⁰ in identified areas, including Carcross.

Until Critical Habitat is established, Environment Canada has recommended that the Carcross LAP adopt a cautious approach weighted towards conservation and minimizing impacts on the dunes until more information is available. A *Recovery Action Plan for Baikal Sedge* is anticipated in 2016.

Considerations:

- Planning and regulating recreational activities and development of the dunes has to be undertaken in a manner that does not compromise the overall health of the Baikal Sedge populations in the area.
- Should Baikal Sedge not be down-listed from a Threatened species to a Species of a Special Concern, then the 2016 *Recovery Action Plan for Baikal Sedge* might specify Critical Habitat areas that could limit development.
- New habitat information should be considered in the management of the area as it becomes available.

Shoreline & Waterfront

The waterfront and shoreline areas of Lake Bennett, Natasheeni Narrows and Nares Lake are significant community assets which are considered environmentally sensitive. They are important to the community for their environmental, recreational, aesthetic and traditional use values.

Flooding and shoreline erosion are tangible issues for residents of Carcross. During the summer of 2007, Carcross experienced a significant flooding event when water levels in Lake Bennett reached 657.448m, only 0.305m below the estimated 200-year flood level. Docks, roads and buildings were flooded, and bridge abutments, railway embankments and other built infrastructure were damaged or suffered erosion.²¹

It is foreseeable that flooding and shoreline erosion problems in Carcross may worsen in the future. Higher spring and summer lake levels, increased wave-induced shoreline erosion and

¹⁹ Environment Canada. (2012). http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2313. (Accessed January 07, 2013).

²⁰ *Critical Habitat* means the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species' critical habitat in the recovery strategy or in an action plan for the species.

²¹ EBA Engineering Consultants Ltd. (2009). *Carcross Natasheeni Narrows Flood Study*.

potential for more frequent and/or higher magnitude floods have all been identified as potential climate change impacts in the Carcross region (see Section 4.10).

In addition, Yukon Energy is currently proposing amendments to their current water license for regulating water levels in the interconnected Southern Lake system via the Lewes River Control Structure (dam). The proposed changes would see consistently higher lake levels during fall months (656.53m) albeit well below flood stage level (656.79m). The forthcoming project assessment may reveal other unanticipated land use impacts e.g., reduced public access to waterfront which needs to be considered in establishing future development setbacks, protecting existing historical assets within the flood zone and maintaining public access.

Considerations:

- Waterfront properties are subject to considerable development pressure. Any development along the shorelines of Lake Bennett and Nares Lake should consider public access to and along the beach.
- In accordance with the *Territorial Lands Act*, a minimum 30.48m setback from the OHWM (waterfront reserve) is required for new land dispositions occurring along the shorelines of identified watercourses and waterbodies on Commissioner's lands. The *Territorial Lands Act* does not apply to Settlement Lands; however, in accordance with Section 5.15.0 of the C/TFN Final Agreement, a 30m Water Right-of-Way has to be provided for settlement lands abutting navigable waters.
- There are presently several privately-owned and leased properties within the planning area which are within the 30.48m OHWM setback. Structures on these properties are at elevated risk to damages caused by flooding and erosion. A number of these buildings have significant heritage values.

Wetlands

Wetlands are present throughout the north-western section of Nares Lake, Grayling Bay as well as along portions of Choutla Creek (see Map 5). Wetlands are important for waterfowl, migratory birds and a broad range of wildlife and overall biodiversity values. Wetlands improve water quality, attenuate floods, and protect shorelines. Wetlands are often associated with strong cultural, recreational and educational values.

Considerations:

- There are no Yukon government or Carcross Tagish First Nation Government regulations or management policies regarding wetland riparian areas for general land development or land use planning. Yukon government management standards and guidelines do exist for specific land use activities, such as forestry and agriculture. Environment Canada has recommended a minimum 60m development setback around any wetlands within the Carcross LAP boundary.

Fish & Wildlife Management

Wildlife management issues cannot be addressed directly through the Carcross LAP. However, land use policy within the LAP can and should support fish and wildlife management initiatives enacted by other agencies or bodies.

The Southern Lakes Wildlife Coordinating Committee (SLWCC) was set up under the Carcross/Tagish First Nation and Kwanlin Dün First Nation Final Agreements in order to:

- coordinate the management of moose, caribou, sheep, and other wildlife and their habitat in the Southern Lakes area to promote their recovery and conservation; and
- coordinate the involvement of member governments and others in the management and recovery of wildlife and their habitat in the Southern Lakes area.

The SLWCC has recently completed their *Regional Assessment of Wildlife in the Yukon Southern Lakes Area* which is organized into two volumes: (1) Context & Recommendations; and (2) Species Status Assessment. The conclusions and recommendations generated through this assessment has direct implications for wildlife and habitat management throughout the Carcross local planning area.

Considerations:

- Information related to wildlife and wildlife habitat, including best practices for land use activities occurring in or near important habitats is incomplete. New information concerning best practices for fish and wildlife management will have to be incorporated into land use policy and decision-making as information becomes available.

Recreational Uses

Lake Bennett Beach and the Carcross Dunes & Desert are popular recreational areas for both local residents and visitors. Recreational activities occurring in these areas, particularly unregulated motorized recreational use, are considered by some to have had detrimental impacts on ecosystem health and to be incompatible with non-motorized use of the community's recreational assets.

The majority of residents acknowledge the importance of their present trail system to community life. Maintaining connectivity within the existing trail network, in particular the community ski trails, will be a key development consideration. Others note that most of these trails simply evolved over time without formal route planning to minimize terrain impacts, user conflicts and/or respect vacant private land ownership.

Access to the surrounding hinterland has also been raised as an issue, in part because there is substantial C/TFN Settlement Land abutting the LAP boundary. Land use issues related to

unmanaged recreational trail activity are likely to increase with future population and economic growth. C/TFN's recent initiative to develop a planned trail system on Montana Mountain for example, is generating considerable mountain biking interest that is attracting new recreational users to the community.

Considerations:

- Unmanaged motorized recreational activities pose risks to environmental values in the area, as well as to community health and safety. If the status quo is maintained, these risks will increase as the community grows in population.
- YG is currently exploring the possibility of managing trail use through provisions in the Carcross area development regulations.
- Any land development will impact recreational trail users given the layout of the present trail system. Some compromises on trail location including the option for rerouting some sections will need to be considered to optimize limited land availability.

4.4 SERVICING

As an unincorporated community, Carcross residents pay low taxes in exchange for limited services (e.g., road maintenance, water delivery and sewage education). While limited serviced lots are less expensive to develop and can be brought to market sooner, they cannot support higher-density housing forms. They also consume more land than conventionally serviced lots (e.g., piped water and sewer) as more space is required for onsite sewage disposal systems. By contrast, conventionally serviced residential lots consume less land, support infill densification and improve fire safety. Serviced lots cost more upfront and therefore are perceived as less affordable. They also require a larger tax base to support operational costs. Surface improvements such as the installation of sidewalks, curbs and gutters are often coordinated with the installation of underground services. This may be perceived by some as compromising some of the community's small town and unique historic character.

All existing residential lots within the Carcross LAP are "limited service" regardless of zoning designation applied or minimum lot size. Almost two-thirds of the existing residential lands are being used for low density country residential development in a community which already has significant land development constraints and housing choice limitations. Accordingly, it may be desirable to develop a mixture of options including higher-density "serviced" residential lots that allow for more housing variety and lower-density "limited service" country residential lots which are less expensive.

Without significant YG subsidy the existing community tax base is not sufficient to support the substantial infrastructure investment required to create conventional fully-serviced lots within the 20-year timeframe of the Carcross LAP. The core planning issue then becomes determining what level of servicing standard is appropriate and feasible in Carcross, to support community

objectives for growth, economic diversification and housing affordability within a limited tax base. Criteria that provide guidance in determining when improvements and/or upgrades are required and what the service area boundary should be between “serviced” and “limited service” areas is also needed.

Considerations:

- Issues of servicing directly influence the community’s ability to grow in a sustainable manner. A compact urban form cannot be achieved without substantial servicing and infrastructure upgrades.
- Levels of servicing will also influence how community development needs are best balanced with environmental stewardship responsibilities.
- There is an identified need to establish a preferred level of servicing standard for Carcross and delineate a core servicing area.
- Servicing standards are related to adequate fire protection and risk reduction which, in turn, affects insurance rates and the insurability of some heritage assets.

4.5 HERITAGE VALUES

Carcross has a rich heritage influenced by the culture and history of Carcross/Tagish First Nation, the Klondike Gold Rush, and the development of transportation infrastructure throughout the 20th century. Heritage features are an integral part of the community’s character. Only fragments of the full history of Carcross are reflected in the heritage resources that remain and they are in various states of repair.

In 2008, the Heritage Branch of YG Tourism & Culture compiled a *Summary of Carcross Historic Sites*. The inventory identified 70 sites of historic interest within the Carcross LAP boundary including residential dwellings, commercial and industrial buildings, the SS Tutshi, structures such as the Swing Bridge and remains of the breakwater. These sites were organized into five general heritage zones: Bennett Avenue, Carcross West, Downtown Core, Carcross East and South Carcross. The identified heritage sites are illustrated on **Map 8 – Carcross Historic Sites**.

Heritage conservation is a key community priority. A heritage inventory is the just the first step in developing a heritage management plan that includes policies on preservation, conservation, rehabilitation, re-use and interpretation. Carcross is currently without any coordinated means of protecting, managing or promoting its numerous heritage resources. There are also no guidelines to ensure future development will respect community character and that rehabilitation of heritage structures will maintain historic integrity.

Incorporated communities under the *Municipal Act* can undertake a number of interventions to protect community heritage values. Dawson City was the first Yukon community to develop and

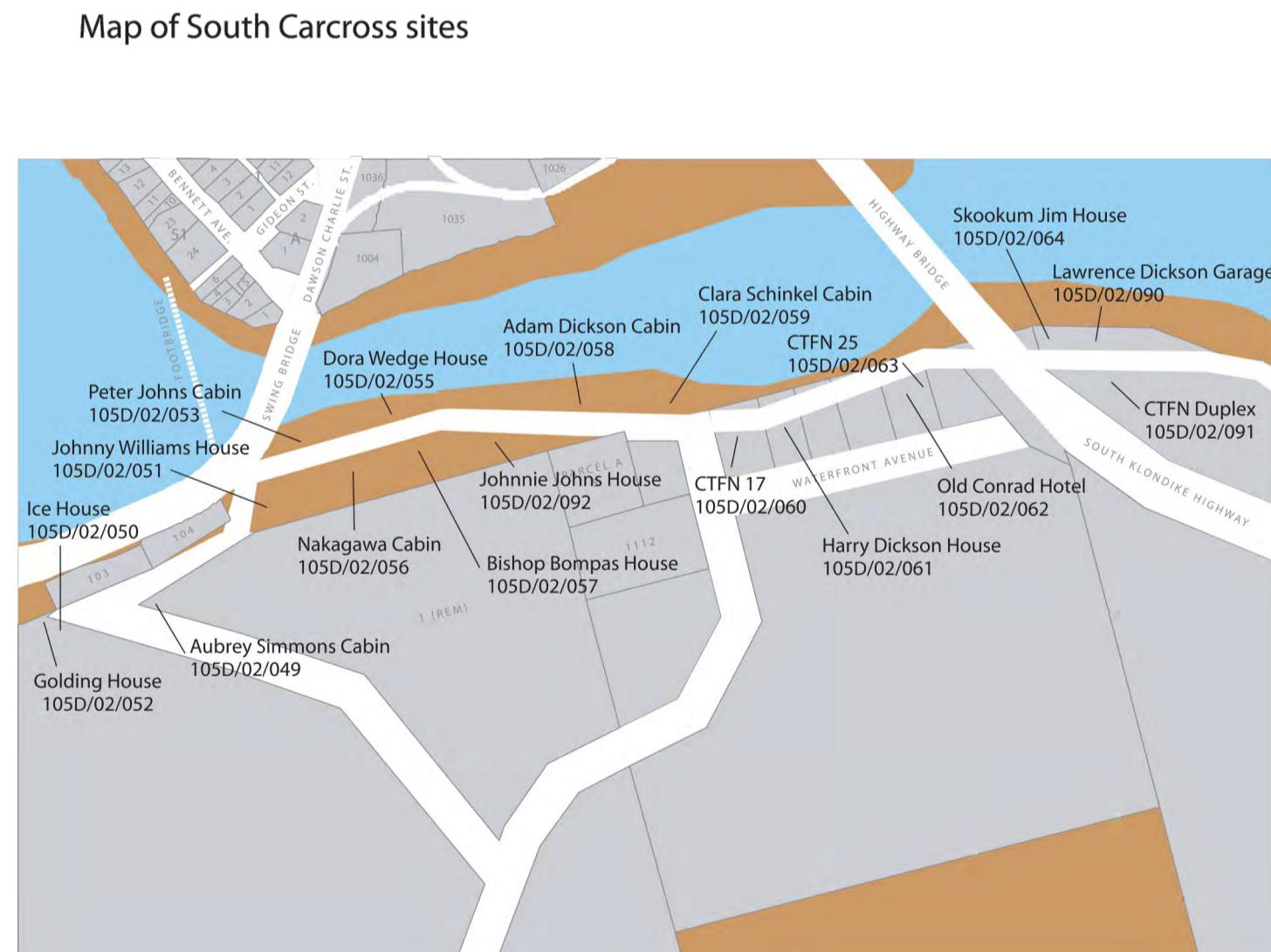
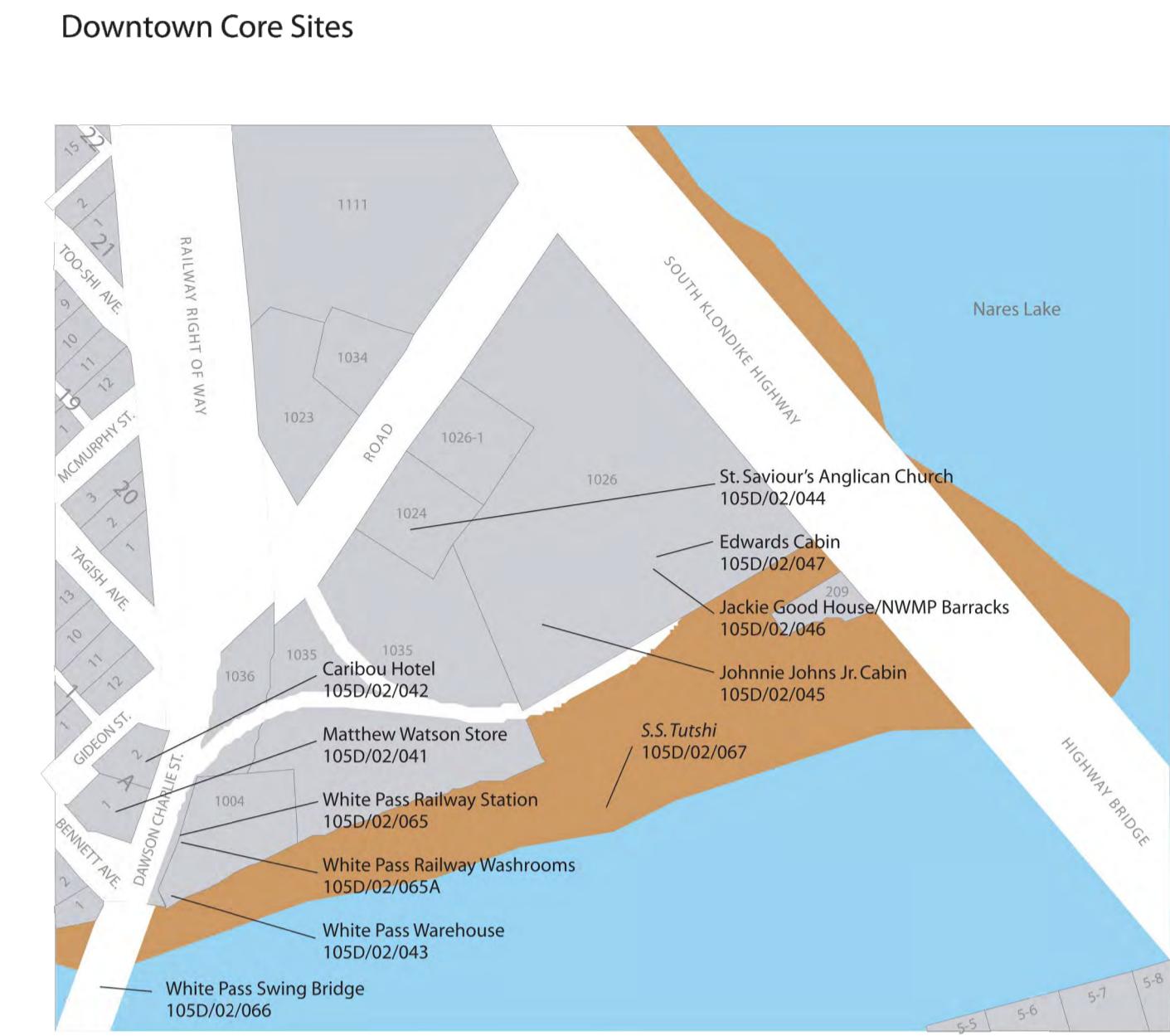
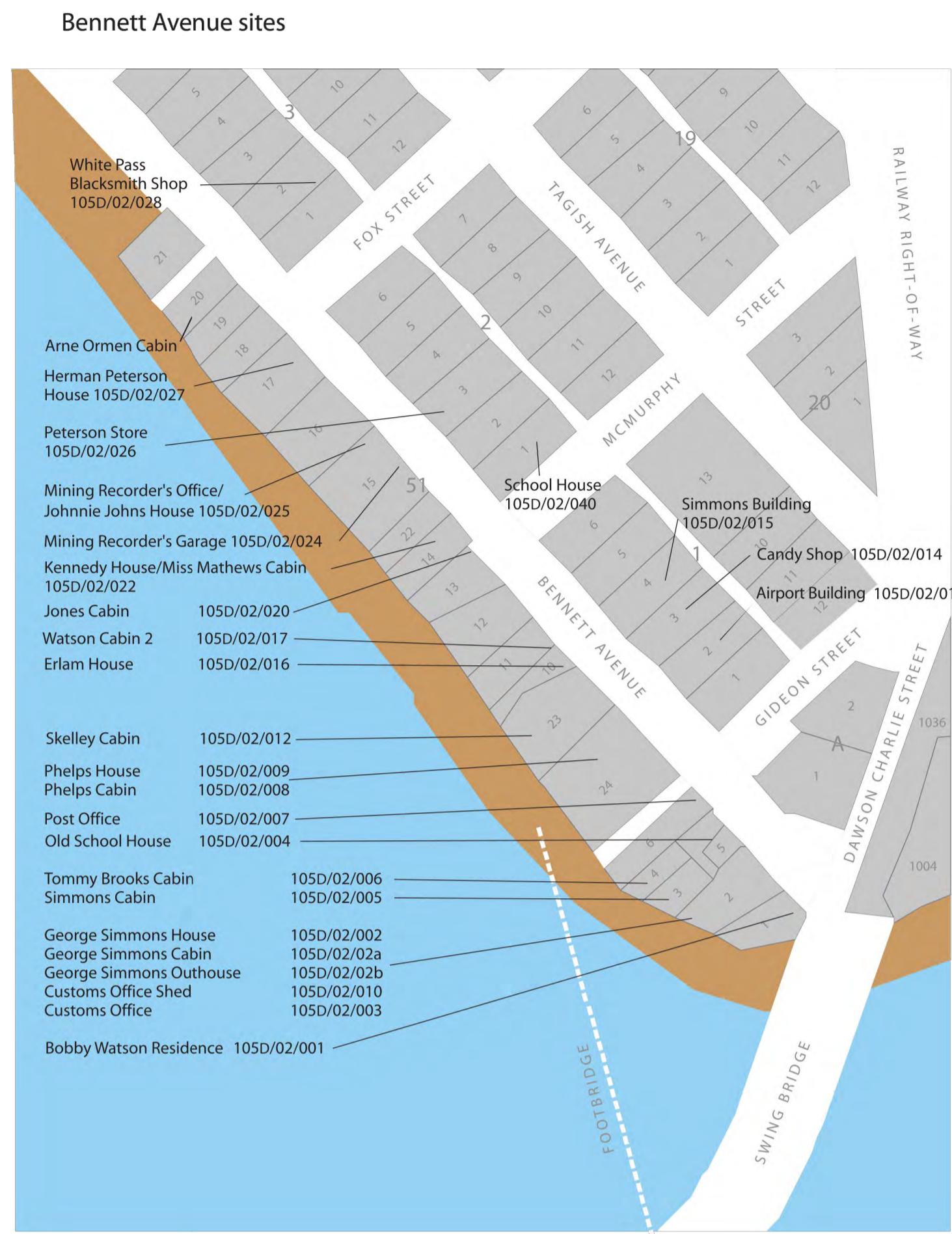
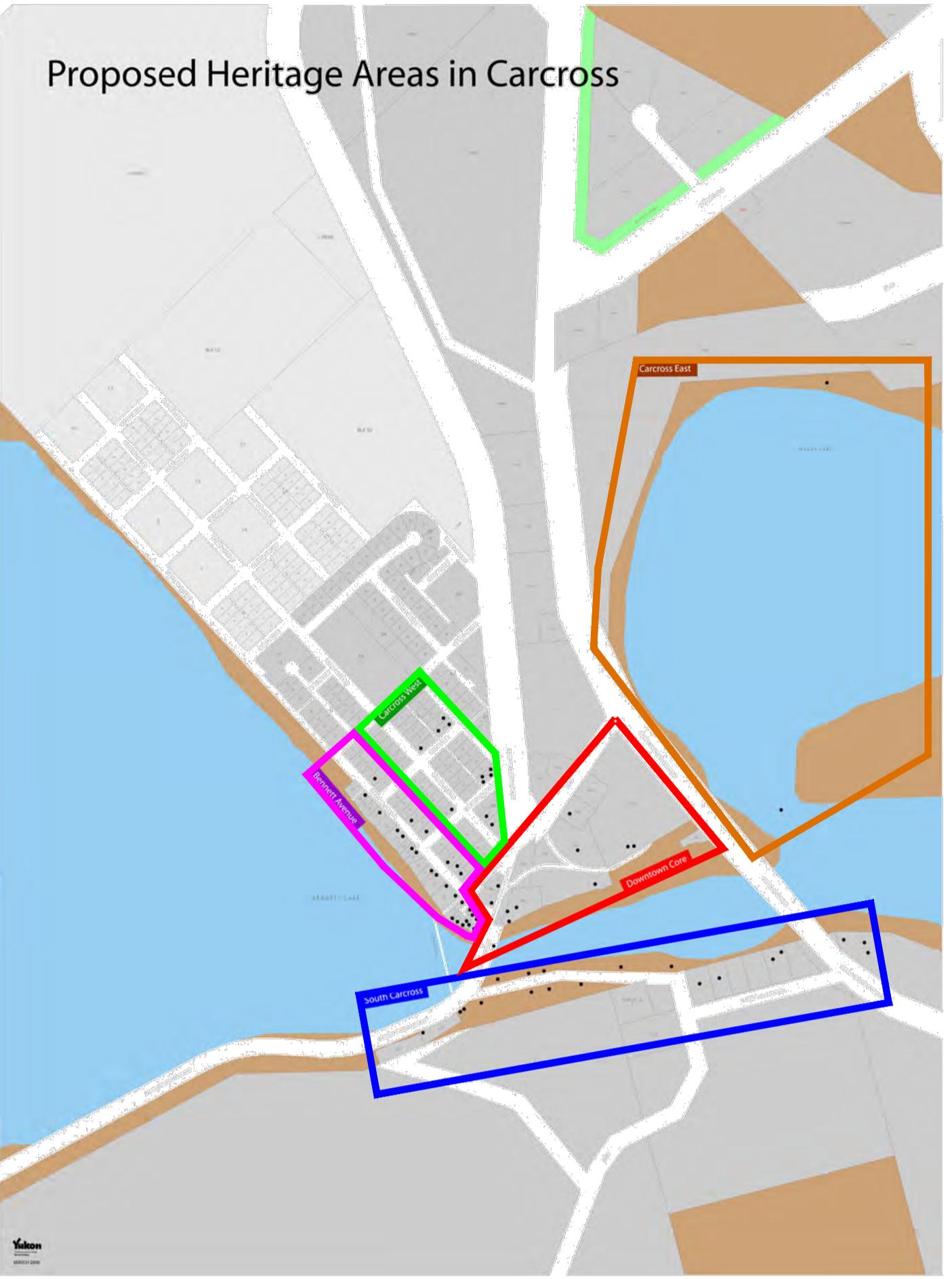
implement such requirements. In unincorporated communities the situation is less clear. In theory, responsibility for heritage protection from a land use regulation perspective would rest with YG Land Planning who would consult with the Department Tourism & Culture in developing heritage guidelines to be incorporated into the Carcross area development regulations.

The Department of Tourism & Culture, Heritage Branch can also provide assistance for heritage protection through a number of mechanisms including heritage site nominations, grant-based incentives for protection, and technical assistance to maintain and manage heritage properties. Such applications are put forward on a case-by-case basis, and cannot be considered in a more comprehensive, community-based manner. Heritage Branch also has no clear mandate that encourages active intervention. Hence, heritage resource management is done on an adhoc, reactive basis without clear long-term objectives.

Considerations:

- During the plan preparation process, residents acknowledged both the legacy value of the community's heritage resources and their important contribution to the community's sense of place. Several community members acknowledged the social and economic contribution that can evolve out of investment in cultural preservation, especially if such initiatives lead to a healthier and unified community.
- The 2008 *Summary of Carcross Historic Sites* is not necessarily an adequate representation of C/TFN heritage resources, which include tangible assets such as built structures and historic objects, but also include trails, viewscapes and lookouts, as well as intangible assets such as Elder's knowledge, oral stories, and the living history of the Tagish/Tlingit culture.
- Significant heritage values are at risk from a variety of factors including structural building condition, physical location (e.g., susceptibility to flooding or fire), land value pressure etc.
- A significant number of heritage assets are privately owned. The extent to which property owners support and participate in heritage value protection is critical to long term success. Incentives may be required to encourage maintenance, reuse and/or rehabilitation.
- Determining the spatial extent for heritage intervention (i.e., individual sites versus heritage zones) and the degree of intervention preferred (i.e., prescriptive regulations versus discretionary guidelines) needs to be weighed against the level of community support and the likelihood of effective implementation to achieve the objectives desired.
- Guidance on ways to expand opportunities to interpret of community heritage resources are set out in the recently completed 2012 *Carcross and Area Interpretive Plan*²².

²² Department of Tourism and Culture. 2012. *Carcross and Area Interpretive Plan*. Yukon Government.



Source:

Summary of Carcross Historic Sites, prepared by Patricia Halladay and Helene Dobrowolsky for Historic Sites Unit, March 2008

Revised by Barbara Hogan, Historic Sites Unit, September 2008

CARCROSS LOCAL AREA PLAN

**MAP 7 -
CARCROSS HISTORIC SITES**

Drawn:	pp	Datum/Projection:	
Checked:	IR	Project No.:	EMR 11-02
Date:	03/25/2011		

INUKSHUK PLANNING & DEVELOPMENT LTD



4.6 ECONOMIC DEVELOPMENT

Carcross is at a crossroads from an economic development perspective. It is too small to support most businesses and hasn't been able to sufficiently diversify the local economy to break free from its seasonal orientation. As with Skagway and Dawson City, most businesses close during the off-season. Proximity to Whitehorse means businesses in Carcross have difficulty competing with the larger city on price and choice so there is significant economic leakage.

While Carcross is ideally located between Skagway and Whitehorse and central to the Southern Lakes region, it has yet to capitalize on its natural assets to evolve into a year-round destination. Visitation numbers to Carcross distort the local picture because of the short visitor season and actual time the majority of visitors spend in the community. Most are on day trips from Skagway cruise ships. Their tight itineraries leave limited opportunities to purchase local goods and services even if more options were available.

There are some indications that the economic outlook in Carcross is improving. For example, the historic Caribou Hotel is currently undergoing extensive restoration and renovations. It plans to reopen in 2013. C/TFN is currently constructing several new commercial properties within the downtown core, also referred to as the Retail Village. In addition, economic development initiatives located just outside the planning boundary, such as the Montana Mountain Singletrack Trail System, will likely have positive implications for growth and diversification within the community.

Considerations:

- Economic development initiatives are linked to several other planning issues and opportunities described in this section, including: the need for population growth to support local commerce (Section 4.1), constraints imposed by the current level of servicing (Section 4.4), and preservation and protection of heritage values (Sect 4.5).
- There is sufficient land along the South Klondike Highway for highway commercial uses, but limited room for growth and redevelopment within the downtown core.
- During the *Values and Visioning Workshops* residents were quite clear about the type of community they don't want to be, but less sure of the community they want to be going forward. At the heart of this issue is finding the balance between the type, pace, scale and rate of change the community is prepared to handle without losing its sense of community identity.
- Traditional zoning approaches discourage mixed use and take a restrictive rather than permissive approach to the type of uses permitted. This works against local business start-up, including home-based business and mixed use development, which is necessary for economic diversification.
- Strategic investments and partnerships between the YG, C/TFN and local businesses (including WP&YR) are needed to move forward.

4.7 TRANSPORTATION

Railway

WP&YR restored seasonal tourism service to Carcross in 2007. In 2011, they transported 8,247 visitors, 90% of which were cruise ship passengers. Train service consists of one train 5 days/week during the summer season.

It is foreseeable that freight rail service will return to Carcross within the timeframe of the LAP. This will be triggered by the desire to use Skagway for mineral exports. Already Skagway port facilities are being expanded in anticipation of significant resource development in the Yukon and studies suggest the economics of shipping bulk concentrate by rail is quickly becoming competitive with road haul. Freight rail service may prove to be economically feasible in Carcross, independent of whether or not the line is rebuilt to Whitehorse.

Under this scenario, train traffic would occur year round. Train lengths would average 40 to 50 cars and take a minimum of 10 minutes to pass through downtown Carcross blocking the single access into downtown. Frequency of service would depend on demand and likely start with one freight train a day in both directions. Freight train traffic would have considerable impact for the summer tourist season and would further necessitate the construction of an alternate access from the highway into downtown Carcross.

Considerations:

- There are already numerous land use incompatibilities created by rail support land uses other than the station remaining within the downtown core. Without some degree of planning intervention, potential conflicts and land use incompatibilities will only get worse with the return of freight service.
- Freight operations may result in increased demand by WP&YR to use more of their downtown land for industrial support purposes. This would not be the highest and best use of land from a community development perspective.
- Increased train traffic will have implications for residents in terms of quality of life (e.g., noise nuisance), and health and safety (e.g., restricted emergency access).
- While the return of freight rail service is by no means certain, the consequences of not planning for this eventuality may be severe.

Aerodrome

The Carcross Aerodrome is considered a significant community asset. The site has identified heritage values and provides a strategic location for emergency landings in the Southern Lakes region. Advocates of the aerodrome also cite potential tourism/economic opportunities which could be explored in the future. **Figure 2** illustrates the geographic extent of the Airport Reserve.

The aerodrome is limited by its short length and narrow width. It is suitable for small private aircraft, but does not have the length and infrastructure to accommodate larger, high powered aircraft or medevac services. Geographic limitations restrict opportunities to improve its function for these purposes. The airstrip receives minimal maintenance and limited use.

The aerodrome is also located at a strategic location for possible future community expansion. There are adjoining residential and commercial-recreational lands uses, as well as a decommissioned landfill to the north of the runway. Community interest in considering alternative land uses for the aerodrome was assessed during the Carcross LAP process. The vast majority of community members expressed their support for maintaining the aerodrome for aviation purposes. YG has confirmed its intention to maintain the Carcross aerodrome for aviation purposes into the future subject to resources and funding provided it can continue to operate safely.

Considerations:

- The location of the Carcross aerodrome significantly influences land development options on surrounding properties and vice versa. In particular, there are lateral, slope angle and building height clearance restrictions relative to the airstrip runway that extend beyond the airport reserve boundary (see Figure 3).
- The C/TFN Final Agreement (Chapter 22, Schedule A, Part 1, Section 13) contains several provisions specific to the Carcross Aerodrome lands which may influence future land use planning should the aerodrome become decommissioned.
- Aerodrome lands are managed under the jurisdiction of YG Aviation Branch. It is the policy of YG Aviation Branch not to permanently dispose of any lands within an airport reserve. Land is only leased for aviation related uses.
- Land deemed surplus to aviation needs may be turned over to EMR, Land Management Branch for lease or sale provided it would not restrict adjacent aviation operations. This affects two currently existing leases. These leases cover the original airport hangar and a floatplane base on the lake side of the airstrip. Both current leaseholders maintain aircrafts at the site and access the airstrip for aviation purposes.

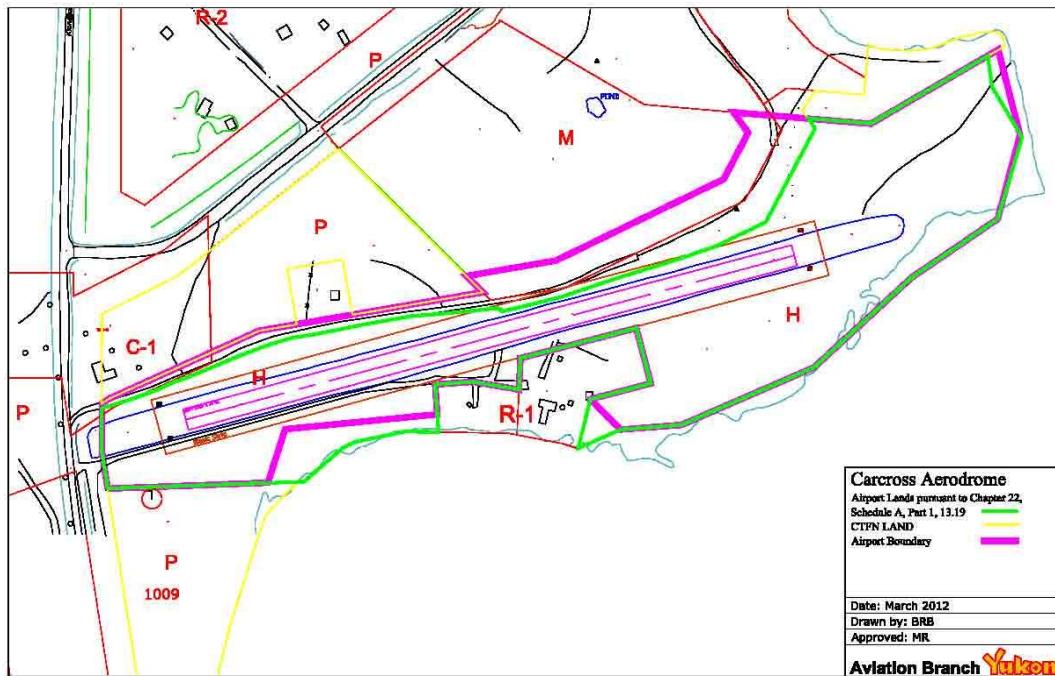


Figure 2: Carcross Aerodrome Reserve and surrounding land uses.

4.8 **HEALTH & SAFETY**

Emergency Access

There is only one access point to downtown Carcross from the South Klondike Highway. When a WP&YR train stops at the downtown station, emergency access to and from the townsite is temporarily blocked. Currently, this is only a problem during the summer tourism season and is generally perceived as an inconvenience. However, if freight service returns as expected, delays will be longer and occur year-round.

Fire protection is the immediate related concern since high winds are common, fire suppression water supply points are limited, and most of the heritage building assets are extremely vulnerable to fire risk given the limited firefighting capabilities of the community. Residents believe any access delay could have catastrophic effects and cite the loss of the SS Tutshi as an example.

Emergency services are also dispersed throughout the community in several locations. Consolidation of emergency services at one location is currently under study but none of the sites would eliminate the train service conflict and need for an alternate access.

Several potential access routes have previously been prepared by Quest Engineering Group in their 2005 *Carcross Alternate Access Options* and 2007 *Carcross Alternate Access Options*

Review. **Figure 3** illustrates the conceptual routing of the alternate access route recommended in the Quest Engineering reports.



Figure 3 - Conceptual Alternate Access Route

The alternative routing illustrated above has been recommended for the following reasons:

- It addresses the core public health and safety risk as a single access means portions of the community could be cut off and isolated during an emergency limiting emergency response;
- It recognizes that train movements pose the greatest potential obstruction and this risk will be compounded in the future if either passenger or freight service are expanded or reinstated on a year round basis;
- It proposes a WP&YR railway crossing point sufficiently north of the existing railway crossing (~ 1 km) to mitigate year-round access disruptions created by longer trains passing through the community;
- It creates a logical future servicing loop and/or servicing boundary for the Carcross townsite;
- It improves overall internal traffic circulation and eliminates problems with deficient Right-of-Way widths in other options;

- The alignment and connection point to the South Klondike Highway and Tagish Road is supported by YG Highway & Public Works; and
- The routing minimizes impacts on existing residential developments and provides the most functional access for development of C/TFN, YG and WP&YR lands in the Carcross townsite area.

Considerations:

- The need for an alternate access into the community is long overdue and must be an essential part of community development going forward.
- Any alternate access route will involve impacts on existing land uses and future land development patterns.
- Any alternate access route will involve a railway crossing and negotiations for access across WP&YR lands.
- The proposed alignment should be sufficiently north of the existing crossing to allow for longer freight trains passing through the community.
- Some community members have suggested a ‘controlled emergency road’ would mitigate most negative impacts. This may potentially address immediate concerns related to health and safety, but does not consider long-term circulation and community growth concerns.
- The recommended alternate access route will impact the dune system and disrupt the ski trails that radiate out from the school. The significance of these impacts will be considered in discussion with community members and affected landowners.

Cemetery

A new community cemetery will be required within the timeframe of the Carcross LAP. Although the existing cemetery - located on the southern shore of Nares Lake on C/TFN Settlement Land - has recently been expanded, local knowledge suggests that it may reach full capacity within the next couple of years.

Considerations:

- Cemetery site selection is a complex planning issue. Selection criteria must consider not only traditional land planning issues (e.g., lot ownership, parcel size, adjacent land uses, and ground conditions), but also address sensitive issues of community, including cultural and spiritual values.
- YG Community Services currently has no written policy for the provision or management of cemeteries in unincorporated communities. That does not relieve them of the responsibility, but points to a gap in policy – probably in part because it occurs so infrequently. In similar situations, community volunteers have stepped up and taken responsibility for operation and maintenance. A similar arrangement has been reached

in Tagish, where the Local Advisory Committee formed a non-profit society charged with cemetery operations.

- Management options for the current cemetery should also be considered. The planning issue revolves around site protection, management of adjacent land use and access control because of some of the unique values present such as direct connections to the Yukon Gold Rush.
- There are limited options for locating a new cemetery within the Carcross LAP boundary. Consideration should be given to potential sites outside the planning boundary easily accessible to community residents.

Contaminated Sites

There are several properties within the Carcross LAP boundary which are defined as contaminated. **Table 5** lists eight sites within the Carcross LAP which have been identified as having contamination above standards set out in Schedules 1, 2 or 3 of *the Contaminated Sites Regulation* (OIC 2002/171).

Table 5 - Contaminated Sites within the Carcross LAP boundary.

Contaminated Site	Site Description	Site Status
Carcross Airport	Site between the airstrip and Nares Lake.	Unknown, no soil sampling has been done
Carcross Pump Station	Pump station built during WW II to transfer fuel from Carcross to Watson Lake. Site located 500m north of downtown Carcross, decommissioned in 1996.	Groundwater remains contaminated
Carcross Waterfront	From 1899–1930's the site was used as a construction base camp, and later in the 1940s it was taken over by the US Army. Rail ties were treated here with diesel and PCP for over 30 years.	Classified as contaminated, no info on restoration
Choutla School	Site of residential school from early 1900s to 1970s. School was demolished in mid-1980s and has since been used as a land treatment unit.	Contaminated
Old Dump/ Sewage Lagoon	Site was used as the old garbage dump and sewage lagoon.	Contaminated
Carcross RCMP Detachment	The detachment is located directly within Carcross and consists of a main office, garage, and a storage shed.	Ongoing remediation and monitoring
Unit 1005, Tagish Ave	Yukon Housing Corporation property.	Contaminated
Lot 1006	Site of previous gas station facility.	Contaminated

Source: YG Environment

Considerations:

- There are no formal land use restrictions placed on contaminated sites by YG Environmental Programs Branch, unless the site is formally “designated” as such. When a site is formally “designated” under the *Environment Act* and *Contaminated Sites Regulation*, development can only take place once contamination has been dealt with in accordance with a YG Environment approved plan of restoration. Permission is required from YG Environment before changing the land use, undertaking excavation or construction, or dismantling equipment or buildings.
- Of the sites listed in **Table 5** only the Carcross Waterfront is a designated contaminated site under the Act and Regulations. It is currently zoned for *Tourist Commercial* uses.²³
- Although there are no land use restrictions associated with the seven remaining contaminated sites, there are health and safety, as well as risk management concerns which require attention prior to any land development.
- Several contaminated sites exist at locations which are considered strategic from a community development perspective (e.g., Carcross Waterfront, Aerodrome, Old Landfill and Choutla School).
- YG Environment contaminated site records are incomplete. There may be additional information on these sites which has not been submitted to YG Environment and therefore do not show up in the records. Some remediation activities have already occurred on several sites listed in **Table 5**, although it is unknown if these sites have been successfully remediated to *Contaminated Sites Regulation* standards.
- Local knowledge suggests there are site contamination issues at several other locations within the community which are not currently captured in the records, reaffirming the need for further work to bring the records up to date. **Figure 4** illustrates several additional site locations identified by Planning Committee members which are of community concern for potential contamination.

Fire Risk Management

The absence of a community Fire Smart Plan to manage wildfire risk is a notable gap in community fire protection for several reasons. First, high winds are common and influenced by the local mountain/valley geography. Turbulent wind behaviour also complicates aerial response if a fire breaks out. The prevailing onshore winds and arid nature of the landscape also contribute to the fire risk..

Choutla Dams

Although outside the Carcross LAP boundary, two decommissioned dams on Choutla Creek located just downstream of Choutla Lake have direct implications for community health and

²³ *Legal Description of Carcross Waterfront:* Vacant Commissioner’s Land, bounded by Lot 1035 to the west, Lot 1026 to the north, Lot 209 and the Klondike Highway to the East, and the Nares River to the South.

safety. The dams have compromised structural integrity. High water levels in Choutla Lake have already caused downstream flood impacts at the creek crossing culverts which, if worsened, could potentially cut off road access to the Choutla subdivision from the Tagish Road. The dams also have impacts on fish habitat and migration within Choutla Creek. Assessing future flood risk and maintaining the health of this riparian corridor has been identified as an issue requiring additional study.

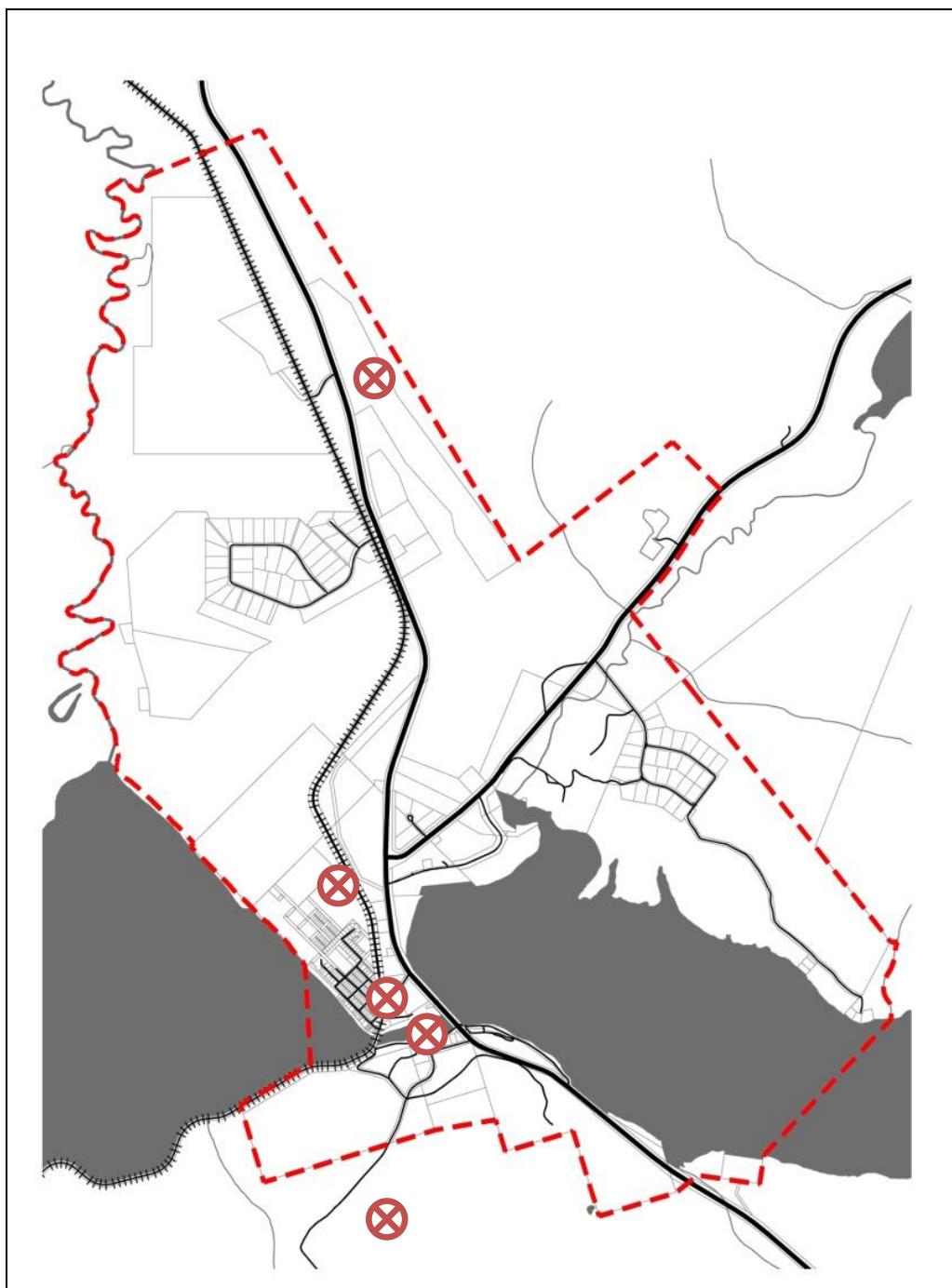


Figure 4: Currently not registered sites of local concern for potential contamination.

4.9 TRADITIONAL LAND VALUES

C/TFN traditional land values exist throughout the Carcross LAP planning area. Examples of traditional land values include, but are not limited to, historic trail networks, fish camps, archaeological sites, wildlife corridors and plant/berry harvesting areas. C/TFN Traditional Knowledge on traditional land values were provided to the consultants by the First Nation and were compiled in a summary table and digitized in map form. For reasons of information sensitivity, a traditional knowledge map is not included within the Carcross LAP. Nevertheless, Traditional value considerations have been considered and incorporated into the land use designations and policies contained in the Carcross LAP.

Considerations:

- In some cases, traditional land values identified by C/TFN have already been compromised by land development patterns. For example, the entire Carcross townsite is a wildlife corridor for caribou. It is not possible to mitigate the impacts of pre-existing land development on these values.
- The provisions of the Carcross LAP do not apply to the waterbodies, hence it is difficult to address traditional values associated with fisheries in these areas except as broadly stated management objectives.
- In areas which are predominantly Settlement Lands (e.g., Choutla subdivision and large portions of Carcross South) C/TFN has retained significant flexibility to manage traditional values under their own land development regulations and policies. These regulations and policies have yet to be drafted and/or ratified. Land use designations contained within the Carcross LAP may not reflect the degree of planning intervention which will be employed by C/TFN to protect and preserve significant traditional and environmental values for these lands.

4.10 CLIMATE CHANGE

The North is at the forefront of climate change and is already experiencing some of the associated impacts, including: warming temperatures, changes in precipitation, earlier spring onset and increasingly volatile weather patterns.

Tables 6 and 7 identify elements in both the physical and build environments around Carcross that may be impacted by climate-induced hydrological change. This information has been summarized from the document: *Hydrology of the Bennett Lake Watershed: Contemporary Conditions and Potential Impacts of Climate Change*, produced by the Northern Climate ExChange in 2011²⁴. The information is intended to be used as a guideline which highlights sensitivities and vulnerabilities for the Carcross region in order to better guide planning processes and land development decisions.

²⁴ Benkert, B. and Lia Johnson. 2011. Hydrology of the Bennett Lake Watershed: Contemporary Conditions and Potential Impacts of Climate Change. Northern Climate Exchange.

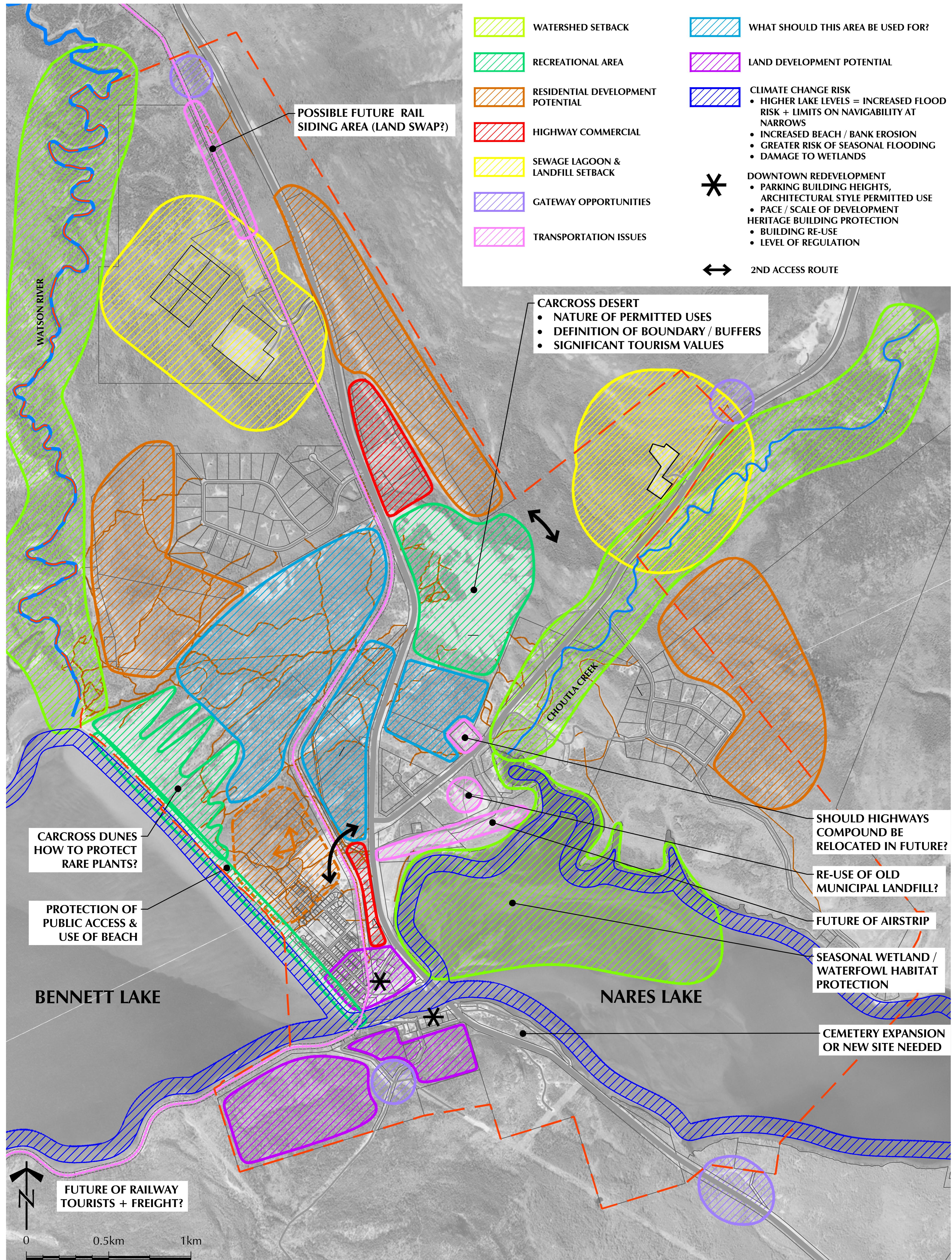
Table 6. Potential Climate Change Stressors and Impacts on Carcross Region Physical Environment

PHYSICAL AND BUILT ENVIRONMENT	POTENTIAL PERTURBATION OR STRESSOR	POTENTIAL CLIMATE CHANGE IMPACTS
Wheaton glacier	Higher mean annual temperature	<ul style="list-style-type: none"> More glacial melt More meltwater infiltration (<i>positive feedback that may exacerbate melt rate</i>)
	Higher mean spring and fall temperature	<ul style="list-style-type: none"> Reduce length of winter season and hence period of potential glacial growth Longer periods of glacial melting each summer
	Higher total annual precipitation; reduced proportion of snow to rain events	<ul style="list-style-type: none"> Higher chance of rain-on-snow events, increasing melt potential Less chance for snow accumulation and glacier growth
	Higher total winter precipitation	<ul style="list-style-type: none"> Potential for increased snow accumulation and glacier growth (<i>although likely offset by temperature effects and overall increases in rainfall</i>)
Wheaton and Watson River discharge	Increased glacial melt	<ul style="list-style-type: none"> Increased river discharge (especially during summer and fall)
	Higher mean spring temperature	<ul style="list-style-type: none"> Earlier melt of winter snowpack Earlier spring discharge peak
	Higher mean winter temperature	<ul style="list-style-type: none"> Potential for mid-winter melt events causing mid-winter discharge peaks Smaller spring discharge as a result of mid-winter melts reducing spring snowmelt contributions to discharge
	Higher total winter precipitation	<ul style="list-style-type: none"> Deeper winter snowpacks Higher spring discharge peaks as a result of deeper winter snowpacks
	Higher total summer and fall precipitation	<ul style="list-style-type: none"> Higher summer and fall discharge Increased potential for rain-driven flood events
Bennett Lake	Increased glacial melt and river discharge	<ul style="list-style-type: none"> Higher spring and summer lake levels Greater potential for more frequent and/or higher magnitude floods
	Higher mean spring and fall temperature	<ul style="list-style-type: none"> Earlier ice-cover break-up and later freeze-up, resulting in reduced ice-cover season Reduced on-ice travel safety
	Higher mean summer and fall temperature	<ul style="list-style-type: none"> Increased potential for evaporation and lake-level drawdown (<i>although likely offset by precipitation and river discharge increases</i>)
	Higher mean winter temperature	<ul style="list-style-type: none"> Potential for mid-winter ice-cover melt
	Higher total summer and fall precipitation	<ul style="list-style-type: none"> Increased summer and fall river discharge, further increasing late summer water level peaks
	Higher winter precipitation	<ul style="list-style-type: none"> Deeper snowpacks resulting in increased river discharge to Bennett Lake, resulting in higher snowpack-induced lake level increases
Bennett Lake shoreline	Increased storminess	<ul style="list-style-type: none"> Increased wave-induced shoreline erosion Increased wave overtopping
	Increased glacial melt and river discharge	<ul style="list-style-type: none"> Higher lake levels along shoreline Higher elevation of shoreline erosion
Permafrost and groundwater	Higher mean summer and mean annual temperatures	<ul style="list-style-type: none"> Increased permafrost thawing Increased snowmelt and precipitation infiltration; lower overland flow Increased rates of groundwater recharge and storage Increased surface ponding (in areas where thawing permafrost creates subsidence) or drainage of surface ponds (where unthawed permafrost formerly created a barrier to drainage) Later and decreased peak annual flows and lower rainfall-related discharge peaks (unless offset by summer rainfall increases) Higher riverine baseflow (especially in winter) and hence discharge to Bennett Lake

Table 7. Potential Climate Change Stressors and Impacts on Carcross Region Built Environment

PHYSICAL AND BUILT ENVIRONMENT	POTENTIAL PERTURBATION OR STRESSOR	POTENTIAL PERTURBATION OR STRESSOR
BUILT ENVIRONMENT	Roads and bridges	<p>Increased glacial melt and river discharge</p> <ul style="list-style-type: none"> Increased potential for more frequent and/or higher magnitude flooding Necessity for emergency protection measures (e.g., riprap, sandbagging)
	Increased storminess	<ul style="list-style-type: none"> Increased wave overtopping (especially along the pedestrian bridge) Increased erosion of bridge abutments
	Increased water levels in Bennett Lake and the Narrows	<ul style="list-style-type: none"> Increased wave overtopping Higher flood levels and increased susceptibility to flooding Erosion at higher elevations along abutments Reduced boat clearance (e.g., RCMP and EMR boats)
Built infrastructure (e.g., docks, boardwalks, buildings)	Increased flood frequency and/or flood magnitude	<ul style="list-style-type: none"> Flooding of built infrastructure Necessity for emergency protection measures (e.g., riprap, sandbagging)
Water intake pipe	Increased storminess	<ul style="list-style-type: none"> Increased sedimentation (due to wave action, heavy precipitation, etc.)
	Higher river discharge	<ul style="list-style-type: none"> More sediment delivery to Bennett Lake (especially important with regard to Watson River discharge)
	Higher mean spring temperature	<ul style="list-style-type: none"> More rapid spring melt, resulting in higher spring discharge, potentially increasing riverine sediment delivery in the vicinity of the water intake
	Higher total summer and fall precipitation	<ul style="list-style-type: none"> Increased sediment disturbance (especially in nearshore zone and if rainfall is heavy)

MAP 8 - ISSUES, OPPORTUNITIES & CONCERNS



PART 2: RESULTS



5.0 LAND USE DESIGNATIONS AND POLICIES

5.1 COMMUNITY & YOUTH VISION STATEMENTS

The **Carcross 2030 Vision Statement** is the foundation of the Carcross LAP. It reflects the unique qualities, common values, aspirations and expectations of the Carcross community as expressed in the June 2011 *Visioning Workshop*.

The Vision Statement provides the framework for development of principles, objectives, policies and implementation actions contained within the Carcross LAP. Simply put, the Vision Statement summarizes the kind of future the community wants while the plan provides a roadmap on what actions need to be taken to get there.

CARCROSS LOCAL AREA PLAN VISION STATEMENT

CARCROSS IS A UNIFIED, PROSPEROUS, PROUD & HEALTHY COMMUNITY. WE ARE STEWARDS OF OUR HISTORY, CULTURE AND NATURAL ENVIRONMENT.

Distinct, but related to the Vision Statement, is the **Carcross Student Vision Statement** which reflects the priorities, values and needs of the individuals and future community leaders who will ultimately inherit the legacy of the Carcross Local Area Plan.

KEY THEMES FROM THE STUDENT VISIONING WORKSHOP:

- AN ENERGETIC, FUN AND YOUTHFUL COMMUNITY
- PRESERVING SMALL TOWN FEEL WHILE ALLOWING MORE PEOPLE TO LIVE AND VISIT CARCROSS
- MORE TO SEE AND DO WITH LOTS OF CHOICE FOR FOOD, ENTERTAINMENT AND RECREATION
- A SUPPORTIVE COMMUNITY WITH IMPROVED EDUCATIONAL, RECREATIONAL AND SOCIAL PROGRAMS
- MORE JOBS AND ENTREPRENEURIAL OPPORTUNITIES

Figures 5, 6 and 7 illustrate the complete community and student visioning workshop results as captured by team graphic facilitator Avril Orloff.

5.2 COMMUNITY VALUES DESCRIPTION

To achieve the community vision it requires a clear understanding of the community's values. These are the common, fundamental beliefs and characteristics that bind community residents together. They are the features which make Carcross a unique place to live and which residents value most about Carcross life. As the land use plan is implemented, these values are expected to be respected and protected.

COMMUNITY VALUES:

- BEING CLOSE TO NATURE, SURROUNDED BY WATER AND MOUNTAINS, PEACE AND QUIET
- THE OUTDOOR RECREATION CHOICES AND THE UNDERUTILIZED DEVELOPMENT POTENTIAL
- SMALL TOWN LIFESTYLE AND "COLOURFUL" PEOPLE
- SIZE, SCALE AND CHARACTER OF BUILDINGS
- LIVING HISTORY AND TAGISH/TLINGIT CULTURE
- THE POTENTIAL TO INFLUENCE HOW A STRONGER, YEAR-ROUND ECONOMY CAN BE BUILT

Figures 8 and 9 illustrate the “raw” community workshop results as captured by the graphic facilitator.





Figure 5 - Carcross Community Vision Workshop Graphic Facilitation

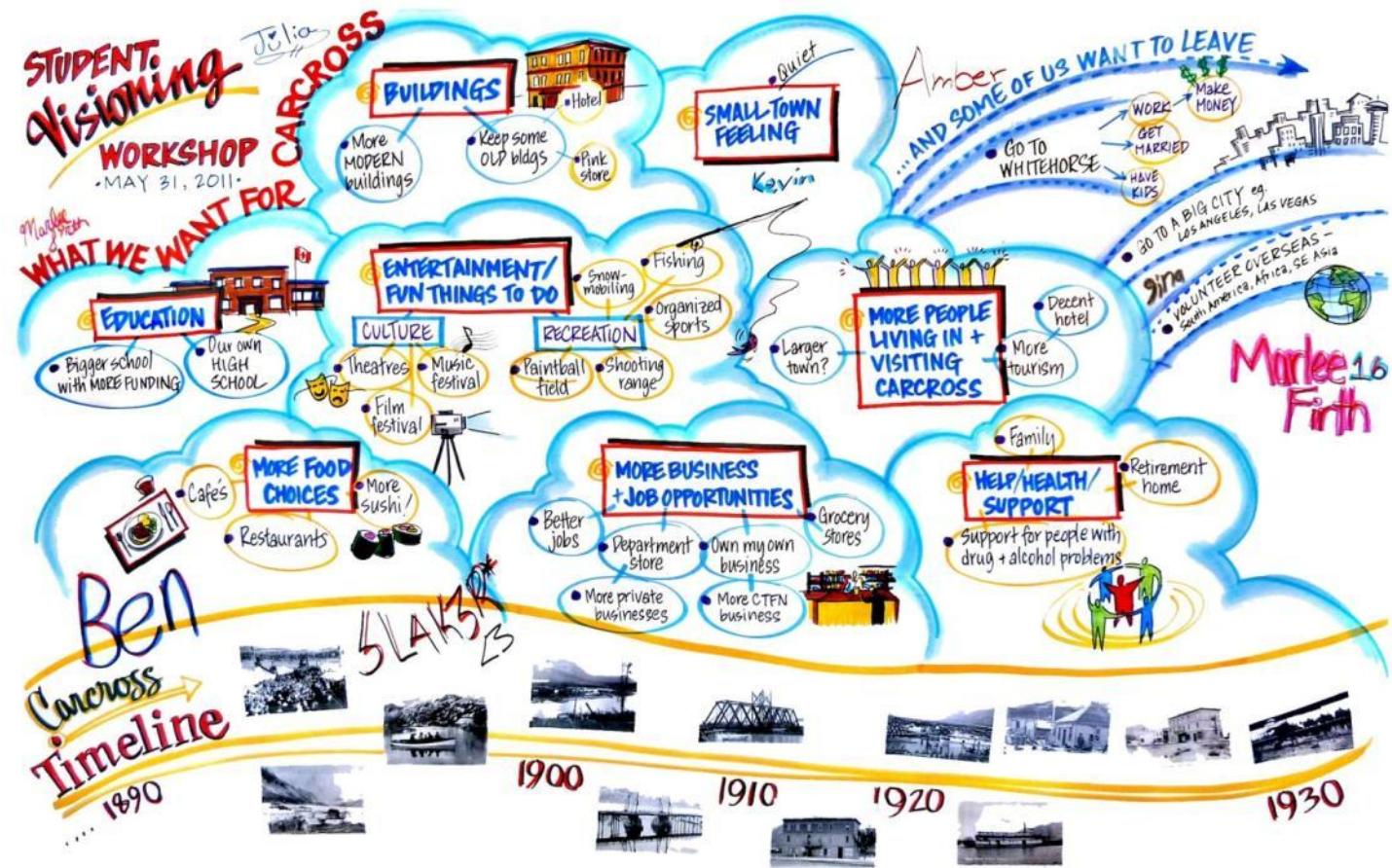


Figure 6 - Carcross Student Vision Workshop Graphic Facilitation – Part 1

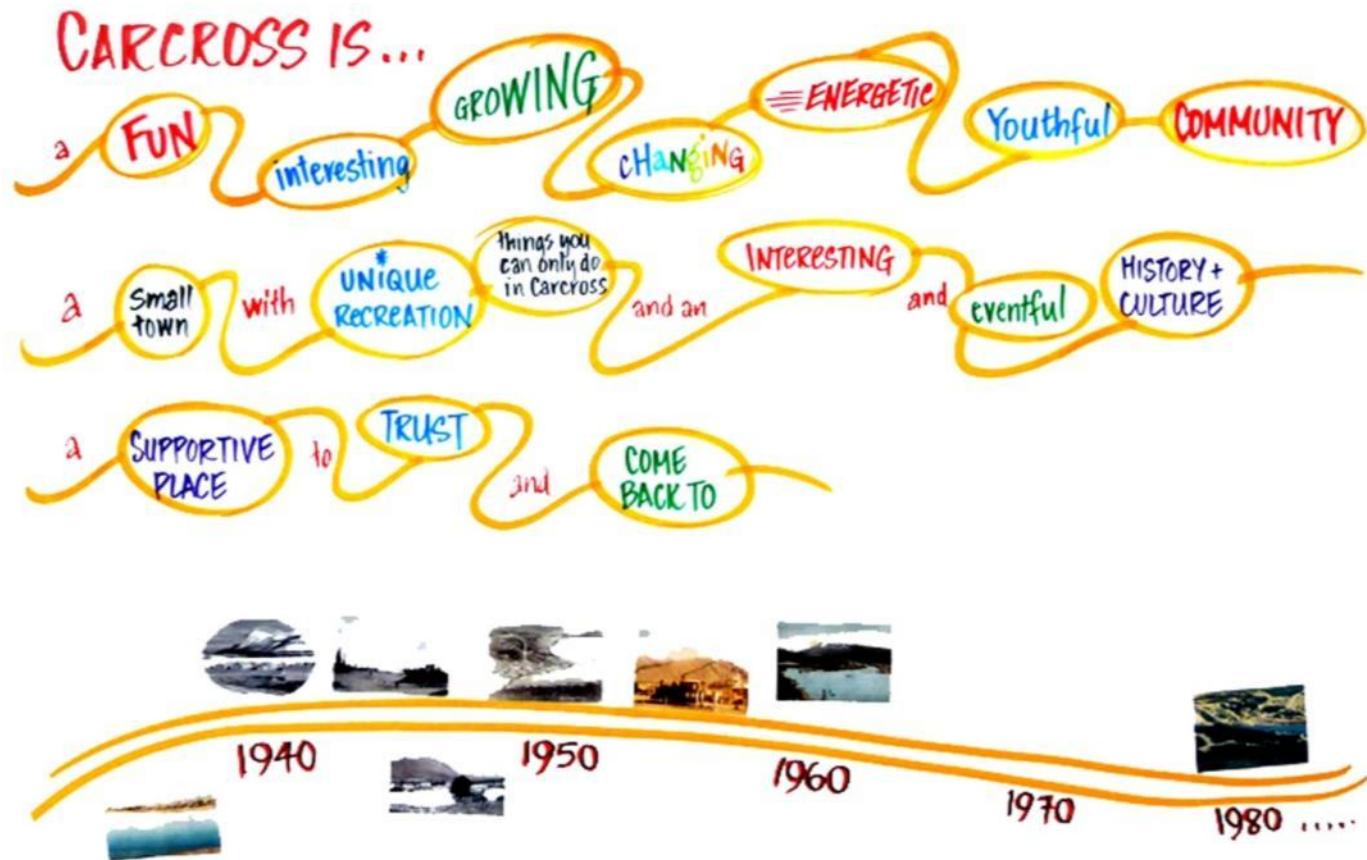


Figure 7 - Carcross Student Vision Workshop Graphic Facilitation – Part 2



Figure 8 - Carcross Community Values Afternoon Workshop Graphic Facilitation

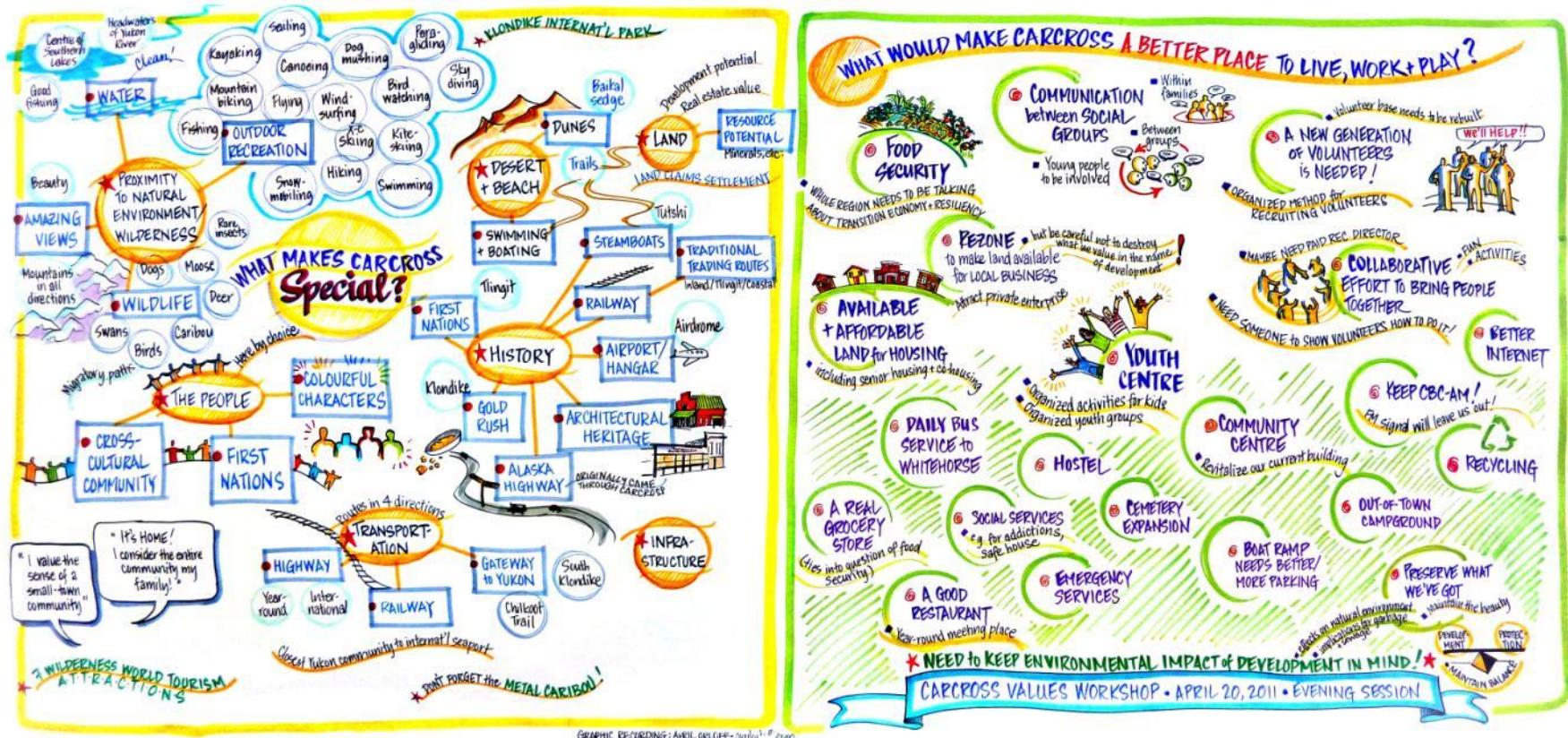


Figure 9 - Carcross Community Values Evening Workshop Graphic Facilitation.

5.3 COMMUNITY DEVELOPMENT PRINCIPLES

The Vision Statement and Values Descriptions reflect the community's desire for a principled, holistic planning approach. Long-term community sustainability requires social, economic and environmental diversity. This in turn will be influenced by the scale, pace, timing and focus on plan implementation priorities. Effective land use plans need to be "living documents" that evolve and adapt to changes over the life of the plan. A holistic plan also includes visible and transparent measures to evaluate progress and accountability.

Effective community development in Carcross is based on four guiding principles. These principles focus on:

- building community capacity;
- fostering participatory decision making; and
- ensuring accountability for plan implementation so community sustainability objectives are achieved.

Principles were developed based upon feedback received from the Carcross community during the *Values and Visioning Workshops*, a review of existing local area plans, and land use planning best practices.

Principle #1: Future land use and development is guided by common values, local needs and aspirations with priorities derived through consensus.

Principle #2: Land use decisions occur in a timely manner using an open, transparent and collaborative process that acknowledges the authority having jurisdiction.

Principle #3: Land use management and development policy is guided by highest and best use; a precautionary approach to the maintenance of ecosystem diversity and environmental stewardship; and, the intent of ensuring future development occurs in a logical, orderly and sustainable manner.

Principle #4: Progress in plan implementation is determined by measurable, visible, and tangible performance targets based on plan vision and goals.

5.4 LOCAL AREA PLAN OBJECTIVES, POLICIES & ACTIONS

The following section contains objectives, policies and implementation actions which will help to realize the community vision by guiding future land use and management in the Carcross area in a manner consistent with community values and development principles.

Objectives and policies have been developed with the participation and input of YG, C/TFN and Carcross members at large.

The policies described in this section apply to all lands within the Carcross LAP boundary while specific land use designations and associated policies are described in Section 5.5 onward.

5.4.1 Growth Management

Growth management focuses on where and how the community might grow taking into account geography, existing land use and tenure, servicing constraints and population forecasts.

Maintaining an adequate lot supply for all types of land uses will be challenging in Carcross. The core issue is that the community has little choice on **where** it can grow, but some control over **how** it will grow. All choices will involve some trade-offs and compromises.

Land suitable for development is constrained by both biophysical factors (e.g., surrounding mountains, rivers and lakes), existing land uses (e.g., railway and highway Right-of-Ways, sewage lagoon), as well as more complex issues of land tenure and ownership. For example, WP&YR and C/TFN control the greatest amount of land suited for development while the majority of undeveloped YG land is more suited to conservation purposes. From a growth management perspective, this arrangement creates significant uncertainty as to the availability of developable Commissioner's lands for the future expansion needs of Carcross. Land purchases, land swaps, innovative public/private partnerships, mixed-use developments, regulatory flexibility, etc. will be needed to ensure community growth occurs in an orderly, efficient and cost-effective manner.

For these reasons, the Carcross LAP incorporates considerable flexibility into the land use designations applied to new residential and commercial development areas. In addition, the cumulative land area identified for future development exceeds projected growth over the life of the Carcross LAP. Careful and ongoing consideration must be given to the assessment of land demand and availability, development phasing, and land development implications for preservation of existing community character and values.

The Carcross Land Use Map attached as **Schedule A** illustrates the approximate location of proposed development areas in all land use categories.

Of particular concern to some community residents are the proposed residential and mixed-use designations immediately northwest of the existing townsite. While acknowledging the validity

of these concerns, designations which support development of lands adjacent to the Carcross townsite area nonetheless recommended for the following reasons:

- it promotes a compact, higher-density development form which is conducive to achieving the community vision of a prosperous, vibrant downtown core;
- it improves the feasibility of achieving a higher servicing standard within the existing built-up area (e.g., piped water and sewer);
- it facilitates and capitalizes upon the construction of the required alternate access route; and
- it addresses land availability issues by developing the little available Commissioner's land within the community core.

Notwithstanding this rationale, this recommendation will require due diligence on the part of both governments and major property owners to ensure development occurs in a manner which respects community character and values. Potential impacts to the ecologically sensitive systems will need to be addressed through an environmental assessment and associated public consultation process to determine appropriate and feasible mitigation measures.

Growth Management Objectives:

- 5.4.1.1 To ensure the pace, scale, timing and type of new development respects community values and needs.
- 5.4.1.2 To allocate sufficient areas of Commissioner's and Settlement Land in all categories to support community growth in a logical, orderly and incremental fashion.
- 5.4.1.3 To recognize and maintain existing residential land uses and develop a variety of other residential housing options to accommodate differing lifestyle needs.
- 5.4.1.4 To mitigate existing land use incompatibilities, reduce future land use conflicts and protect public health and safety.

Growth Management Policies:

Sustainable Development

- 5.4.1.5 Opportunities for infill, densification, lot consolidation, mixed-use development, re-use of remediated contaminated sites and the efficient use of existing underutilized or undeveloped lots shall be explored. Infill development opportunities are encouraged prior to new subdivision development.
- 5.4.1.6 Undeveloped Commissioner's lands designated for new subdivision development and requiring installation of public infrastructure are subject to a pre-plan and public review. Pre-plan shall consider issues of:
 - subdivision layout options and development phasing;
 - mitigation of land development impacts on environmental, recreational and traditional values;
 - road access and circulation including emergency access;
 - level of service standards; and

- implementation of community development priorities (see Section 5.4.4) .
- 5.4.1.7 Further to 5.4.1.6, joint subdivision planning between YG and C/TFN is encouraged to mitigate land development impacts, as well as coordinate and facilitate new land development. Joint planning shall not restrict the decision-making ability of either YG or C/TFN.
- 5.4.1.8 Appropriate servicing and infrastructure upgrades are encouraged to support sustainable growth and efficient use of developable lands.

Focusing New Growth

- 5.4.1.9 New residential development shall be focused in the vicinity of the Carcross townsite.
- 5.4.1.10 Further to 5.4.1.9, depending upon its size, scale and impact, new residential development in the Carcross townsite may require completion of: (a) residential development pre-plan which involves community review (Policy 5.4.1.6); (b) long-term community servicing study (Action 5.4.1.24), and (c) the construction of an alternate access route (Action 5.4.1.18 and 5.4.1.19).
- 5.4.1.11 New country residential development shall be focused in the vicinity of the Watson River and Choutla Subdivision areas.
- 5.4.1.12 Further to 5.4.1.11, in considering subdivision layout options for the Watson River Subdivision, YG may entertain modest land use designation boundary adjustments in order to optimize subdivision layout and reduce potential land development impacts. A plan amendment will not be required where the land development proposed is consistent with the plan's overall intent.
- 5.4.1.13 Further to 5.4.1.11, C/TFN acknowledges the significant environmental values present in the Choutla subdivision area. Future country residential development proposed for this area may establish additional environmental setbacks consistent with C/TFN land management and environmental policies.
- 5.4.1.14 New residential/commercial mixed-use development shall be focused in the vicinity of the Bennett Lake waterfront, south of the Watson River subdivision, Klondike Highway/Tagish Road, and on the southern shores of Lake Bennett.
- 5.4.1.15 Land development under all designations shall occur in a phased and co-ordinated fashion which is responsive to market demand and community need. New information concerning population growth and land development demand shall be incorporated into decision-making as information becomes available.
- 5.4.1.16 Lot enlargements applications on both Commissioner's and Settlement land shall adhere to the policy intent contained within the current YG lot enlargement policy and C/TFN policies. Specifically, applications shall:
- conform to land use designations and policies contained within the Carcross LAP;
 - reasonably demonstrate a need for additional lands;
 - show that lot enlargement only extend into areas designated for the intended future use;

- be limited to the size required to meet the demonstrated need; and
 - be limited to a size that will not enable future subdivision.
- 5.4.1.17 Further to 5.4.1.16, no lot enlargement shall extend into a survey road Right-of-Way (e.g., alleyways in downtown residential area). Surveyed road Right-of-Ways shall be kept unobstructed to ensure emergency access and the delivery of emergency services.

Alternate Access

- 5.4.1.18 An alternate access route is recommended to address safety concerns, facilitate future land development and improve traffic circulation. The recommended alignment shall generally follow the route illustrated in **Figure 3** by: (1) intersecting with Tagish Road / Klondike Highway; and (2) connecting to the existing Tagish Avenue Right-of-Way within the townsite.
- 5.4.1.19 Further to policy 5.4.1.18, the final alignment of the proposed alternate access route shall be considered as part of the residential development area pre-plan (Policy 5.4.1.6) and long-term community servicing study (Action 5.4.1.24).

Industrial Land Management

- 5.4.1.20 Existing industrial uses incompatible with future community development will be designated non-conforming and be encouraged to relocate outside the downtown core to lands designated for industrial use.
- 5.4.1.21 A site with sufficient land for relocation of existing WP&YR non-conforming industrial uses, as well as room for expansion to accommodate reintroduction of freight service shall be set aside by the existing sewage lagoon.
- 5.4.1.22 Further to policy 5.4.1.21, should WP&YR choose to consider other sites outside the Carcross LAP boundary for relocation of non-conforming railway activities, lands adjacent to the sewage lagoon may be made available for other light industrial uses.
- 5.4.1.23 New service industrial land development shall be concentrated in the vicinity of the existing solid waste transfer station.

Growth Management Actions:

- 5.4.1.24 Work towards the completion of a long-term community servicing study to confirm desired level of service standards and a core servicing area boundary.
- 5.4.1.25 Work towards the construction of the recommended alternate access route as described in Policies 5.4.1.18 and 5.4.1.19.
- 5.4.1.26 YG and/or C/TFN will pursue land purchase or land swap options in order to acquire lands which may be required for purposes of community development, land management, environmental protection, heritage preservation and/or relocation of non-conforming land uses as well as other purposes suited to the implementation of the Carcross LAP.
- 5.4.1.27 YG and/or C/TFN will work with WP&YR to pursue land development options for the

relocation of rail functions from the downtown core to lands designated for those purposes adjacent to the sewage lagoon or another appropriate location.

5.4.2 Environmental Stewardship

Environmental stewardship is a key component of the Carcross community vision. The stewardship ethic extends to all elements of the Carcross LAP. Of particular relevance are the management and conservation of the Carcross dunes and beaches, protection of flora and fauna, and managing community risk related to fire, flooding and shoreline erosion.

Environmental Stewardship Objectives:

- 5.4.2.1 To respect the area's biodiversity and habitat quality by:
 - conserving the dune system and protecting rare plant habitats;
 - conserving wetland ecosystems, fish habitat and migratory bird staging areas; and
 - maintaining open space corridors to support wildlife movement connectivity.
- 5.4.2.2 To maintain and promote all significant natural features within the planning area including: the shorelines of Lake Bennett, Nares Lake and Natasheeni; Carcross Beach, Dunes & Desert; Watson River and Choutla Creek.
- 5.4.2.3 To address current and future community safety risks (e.g., wildfire, flooding, dunes, shoreline and riverbank erosion, etc.).

Environmental Stewardship Policies:

Environmental Stewardship

- 5.4.2.4 Areas with significant environmental values considered to be ecologically sensitive, or unsuitable for development shall be preserved in a largely natural state and the precautionary principle shall govern management action.
- 5.4.2.5 Notwithstanding 5.4.2.4, where encroachment into such areas may be necessary for community development, routing of utilities, services, etc. the proponent shall submit an environmental assessment demonstrating the encroachment is in the public interest to the authorities having jurisdiction.
- 5.4.2.6 New information concerning environmental values shall be incorporated into land use policy and decision-making as it becomes available (e.g., updated information on Wildlife Key Areas, *Baikal Sedge Action Plan*, Yukon Energy Southern Lakes Storage Enhancement Study).
- 5.4.2.7 Pursuit of a collaborative, inter-governmental management and outreach programs for conservation and promotion of the ecologically sensitive dunes system is encouraged.
- 5.4.2.8 Support development guidelines to assist property owners in mitigating potential land development impacts within the dunes ecosystem (e.g., innovative building design, limiting cut-and-fill operations, maintenance of existing vegetation, invasive

species management, etc.).

Fish & Wildlife Management

- 5.4.2.9 The Carcross LAP supports recommendations detailed in the SLWCC *Regional Assessment of Wildlife in the Yukon Southern Lakes Area* in general, and specifically the development of best management practices for land use activities occurring in or near important habitats for identified wildlife species.
- 5.4.2.10 Development proposals considered to have implications for management of local fish, wildlife and forest resources shall be referred to the Carcross/Tagish Renewable Resources Council for comment and recommendation.

Shorelines & Wetlands

- 5.4.2.11 At a minimum, the 30.48m setback from the ordinary high water mark (OHWM) (waterfront reserve or waterfront Right-of-Way) shall be observed for any new land development and disposition occurring on Commissioner's, Settlement and/or private land along the shorelines of creeks, rivers and lakes as well as around wetlands.
- 5.4.2.12 Where existing development has already occurred within the 30.48m setback, property owners shall be encouraged to flood-proof their properties before any new development or change of use is permitted.
- 5.4.2.13 Additional shoreline development setbacks may be established through the Carcross area development regulations or determined on a case-by-case basis when substantiated by a engineering assessment to reduce dune erosion, protect critical wildlife habitat and watercourses as well as anticipate current and future flood hazards.
- 5.4.2.14 The use of private docks shall be discouraged. Should the need arrive, the construction of a public marina shall be considered.
- 5.4.2.15 Development and implementation of shoreline development guidelines and associated policies for wetland, riparian and aquatic areas are supported.

Environmental Risk Management

- 5.4.2.16 Proactive measures to analyze and address community flood and fire risks are required and supported.
- 5.4.2.17 Examination of feasible and effective mechanisms for improved monitoring and management of activities not considered consistent with Environmental Stewardship objectives (e.g., overnight camping/campfires) is supported.

Environmental Stewardship Actions:

- 5.4.2.18 Develop a community Fire Protection Strategy that addresses wildfire risk and mitigation measures (e.g., firesmart treatment), adequate water flow for fire protection of heritage buildings and new development within the townsite, as well as volunteer fire department recruitment and retention.

- 5.4.2.19 Complete a comprehensive community flood risk assessment along Lake Bennett, Nares Lake and Natasheeni Narrows .
- 5.4.2.20 Complete a flood risk and fish habitat protection study from Choutla Lake to the mouth of Choutla Creek.

5.4.3 Heritage Conservation

Heritage conservation is a key community priority. Carcross is currently without any coordinated means of protecting, managing or promoting its numerous heritage resources. Heritage resources include tangible assets such as built structures and historic objects, but also include intangible assets such as Elder's knowledge, oral stories and the living history of the Tagish/Tlingit culture. There are also no guidelines to ensure future development will respect community character and that rehabilitation of heritage structures will maintain historic integrity.

Heritage Conservation Objectives:

- 5.4.3.1 To support protection, management and interpretation of all the community's heritage resources.
- 5.4.4.2 To promote traditional values and support compatible traditional use activities throughout the local planning area.

Heritage Conservation Policies:

- 5.4.3.3 Appropriate heritage design guidelines shall be considered during preparation of the Carcross area development regulations to help ensure that new development complements the heritage and historic nature of the townsite. Guidelines may include historic building form, building materials and colours, lot coverage, etc.
- 5.4.3.4 Further to 5.4.3.3, appropriate design guidelines shall be considered for all heritage zones identified in the 2008 *Summary of Carcross Historic Sites* as well as any other heritage areas identified by the community.
- 5.4.3.5 Further to 5.4.3.3, heritage design guidelines incorporated into Carcross area development regulations shall not be unduly restrictive so as to compromise overall regulatory flexibility and simplicity.
- 5.4.3.6 Community support for a comprehensive Heritage Management Plan shall be formally assessed. The scope, goals and objectives for a Heritage Management Plan shall be defined by the community in collaboration with C/TFN and YG.
- 5.4.3.7 Further to 5.4.3.6, the scope of a Heritage Management Plan may extend beyond the boundaries of the Carcross Local Area Plan and may consider such items as:
 - management consideration for both built structures and other heritage values such as trails, cultural landscapes and viewscapes;
 - identification of suitable policies for the reuse, rehabilitation and/or relocation of heritage buildings;
 - preservation and promotion of intangible heritage values such as oral stories and Elder's knowledge;
 - establishment of appropriate processes to evaluate development proposals

- in heritage areas; and
 - consideration of interpretation, tourism and economic development opportunities for heritage resources.
- 5.4.3.8 Land use designations and nature of permitted uses supported by the Carcross LAP shall not unduly restrict or impede C/TFN traditional values, land uses and activities.
- 5.4.3.9 Development proposals considered to have implications for traditional values, land uses and activities shall be referred to the GC/TFN, Department of Heritage, Lands and Natural Resources for comment and recommendation.
- 5.4.3.10 Ongoing collaboration between C/TFN and YG for the purposes of heritage conservation, specifically the implementation of heritage objectives described in Chapter 13 of the C/TFN Final Agreement, is required and supported.

Heritage Conservation Actions:

- 5.4.3.11 Consideration of heritage design guidelines during preparation of the area development regulations as described in Policy 5.4.3.3.
- 5.4.3.12 Assessment of community support and determination of community objectives for a Heritage Management Plan as described by Policy 5.4.3.6.

5.4.4 Community Health & Wellness

During the *Values and Visioning Workshops*, participants listed a number of community developments which would “make Carcross a better place to live, work and play.” Community members were then asked to indicate their level of support for identified community developments in the *Community Feedback Form*.

Results are ranked in terms of highest to lowest level of community support and are as follows:

- Seniors Housing (86.6%)
- Parks, Playgrounds and Trails (81.6%)
- Community Centre (80.0%)
- Community Garden (76.3%)
- Youth Centre (71.7%)
- Assisted Living Centre (66.3%)
- Safe House (58.9%)
- Social Housing (36.5%)
- Marina (29.8%)

Other community development priorities which were not captured in the *Values and Visioning Workshops* but were identified during community workshops include:

- a community trail linking the waterfront walkway to Grayling Bay with potential for bird watching lookouts and interpretation;
- replacement of the South Klondike Highway bridge;
- a booster station to provide backup emergency power during outages;
- additional lighting along Tagish Road from Choutla subdivision to Carcross Townsite to protect pedestrian safety;
- reinstallation of fencing around the perimeter of the Sewage Lagoon; and
- pursuing opportunities for independent power generation.

Community Health & Wellness Objectives:

- 5.4.4.1 To designate sufficient areas of land for public institutions, utilities and recreational facilities within the community accessible to all residents.
- 5.4.4.2 To provide a similar range and quality of community facilities as are available to other Yukon communities of a similar size.
- 5.4.4.3 To provide safe, attractive public spaces which promote community interaction, celebration, health and wellness.
- 5.4.4.4 To recognize, accommodate and appropriately manage existing recreational uses.
- 5.4.4.5 To reduce and/or mitigate conflicts between motorized and non-motorized recreational users.
- 5.4.4.6 To mitigate public health and safety risks through the remediation of contaminated sites.

Community Health & Wellness Policies:

Community Facilities

- 5.4.4.7 Opportunities for implementing priority community developments listed in Section 5.4.4 shall be considered during all new subdivision developments.
- 5.4.4.8 In general, resources shall be allocated towards improved programming for existing community facilities, rather than new facility construction. Renovation and/or redevelopment of existing facilities are encouraged prior to new capital works. Efficient use of existing facilities is supported by encouraging multiple-use and shared spaces.
- 5.4.4.9 The co-location of fire, emergency, and search-and-rescue services at the location of the existing firehall is supported.
- 5.4.4.10 The potential for redevelopment of former Choutla Residential School for community use (e.g., memorial) is acknowledged.

Cemetery

- 5.4.4.11 The existing historic cemetery shall be maintained strictly for community use.

General visitor access is discouraged. Heritage values located therein shall be interpreted off-site.

- 5.4.4.12 A new community cemetery will be required within the timeframe of the Carcross LAP. In the short-term, a community-driven cemetery site selection process is recommended to identify a suitable location within or outside of the Carcross LAP boundary. Timing of the new cemetery development shall coincide with the closure of the existing cemetery.

Recreation

- 5.4.4.13 To the extent possible, the integrity of community ski trails radiating out from the Ghùch Tlâ Community School shall be maintained during new land development. Of particular importance is maintaining the connectivity of the 1km and 3km trails directly to the school area. Consistent with Policy 5.4.1.6., subdivision layout and trail mitigation options shall involve community input.
- 5.4.4.14 A Carcross Community Trail Plan shall be prepared that:
- includes a public trail map illustrating the routing, name and type of trail within the LAP planning area as well as describes trail use rules;
 - considers community strategies for tourism and economic development, including overall community health and wellness;
 - if deemed necessary, recommends appropriate measures be developed for trail monitoring and management to the authorities having jurisdiction;
 - includes options to reconfigure and/or mitigate trails impacted by existing or anticipated land development;
 - if deemed necessary, incorporates strategies to reduce and/or mitigate impacts of recreational trail use on environmental values (e.g., dunes, wildlife habitat);
 - explores opportunities for interpretation of the trail system to residents and visitors alike; and
 - offers links to adjacent local trail systems, such as for Montana Mountain.

Contaminated Sites

- 5.4.4.15 Remediation of identified contaminated sites is a precondition to redevelopment with the standard to be applied consistent with the nature of intended future use.
- 5.4.4.16 Remediation of the Carcross Waterfront Designated Contaminated Site is a priority. Further investigation into issues such as land use history and parties responsible for contamination is recommended in order to determine appropriate and feasible remediation strategies.
- 5.4.4.17 Redevelopment of the former landfill to a community use standard (e.g., open space) is encouraged. Redevelopment options for the former landfill shall involve opportunities for community input.

Community Health & Wellness Actions:

- 5.4.4.18 Creation of a Carcross Community Trail Plan as described by Policy 5.4.4.14.
- 5.4.4.19 In the absence of a Carcross Community Trail Plan, those authorities having jurisdiction shall explore feasible and effective mechanisms for monitoring and managing motorized recreational activity within the planning area.
- 5.4.4.20 Formation of a cemetery planning committee to oversee community consultation, site selection and operations & maintenance considerations.
- 5.4.4.21 Remediation of the Carcross Waterfront designated contaminated site.
- 5.4.4.22 Investigate and update information on identified contaminated sites within the planning area and incorporate additional sites of community concern into the review to determine contaminated site remediation priorities.
- 5.4.4.23 Ensure every property is assigned a civic address that is available to emergency services.
- 5.4.4.24 Consider mitigation measures for the impacts of large-sized tourist busses in residential areas when developing the new area development regulations.

5.4.5 Economic Diversification

Community size, business seasonality and economic leakage to Whitehorse limit opportunities to create year-round employment and stabilize the local economy. To date, the community has not successfully taken full advantage of its unique assets (e.g., location, proximity to visitor markets, culture and heritage) in a manner which promotes sustainable economic development.

Economic Diversification Objectives:

- 5.4.5.1 To promote Carcross as an all-season destination with a prosperous, diversified economy anchored by a vibrant downtown core.
- 5.4.5.2 To support the pace, scale, type and style of economic development that respects community values, encourages local employment and is consistent with the community's historic and small-town character.
- 5.4.5.3 To support local entrepreneurship and small-business development.
- 5.4.5.4 To identify and designate sufficient land for commercial and industrial uses to support local economic development and employment.

Economic Diversification Policies:

Regulatory Flexibility

- 5.4.5.5 Flexible land use regulations that encourage and support small business start-up shall be incorporated into the new Carcross area development regulations.
- 5.4.5.6 Where appropriate, mixed-use land development is promoted throughout residential and commercial areas.
- 5.4.5.7 Home-based businesses are encouraged throughout residential areas where the business activity is incidental and subordinate to the residential function.

Downtown Focus

- 5.4.5.9 Development regulations prepared for the downtown area shall be simple, inclusive and flexible in order to reinforce the existing compact, mixed-use character, and promote a diverse and prosperous downtown commercial district.
- 5.4.5.10 Vehicle-oriented commercial uses, which may require a larger footprint to accommodate the nature of uses permitted, shall be concentrated along the South Klondike Highway.

Building Partnerships

- 5.4.5.11 Cooperation and partnership between community stakeholders, both governments and the private sector are encouraged to support economic development initiatives that are mutually beneficial to all involved.

Aerodrome

- 5.4.5.12 The Airport Lands and Grayling Bay are recognized as an important community asset and are maintained for community use.
- 5.4.5.13 Any permanent disposition of existing leases within the Airport lands shall:
- maintain public access to and along the shoreline of Grayling Bay, including the potential for establishment of a community trail walkway; and
 - establish appropriate setbacks from shoreline and wetland areas.
- 5.4.5.14 Under YG Aviation Branch policy, additional airport-related uses may be permitted within the Airport Reserve. Prior to the disposition of any new airport leases, it is recommended that an Aerodrome Development Plan be completed to:
- optimize lot layout and development patterns including road access and circulation;
 - incorporate development constraints imposed by Airport Zoning Controls (e.g., height restrictions);
 - maintain public access to and along the shoreline of Grayling Bay;
 - incorporate mitigation measures to address potential impacts on wetlands and migratory bird habitat;
 - identify and address potential issues related to flood-prone areas, bank erosion, etc.; and
 - consider local economic development, interpretive and/or tourism-related opportunities related to local aviation history.

Economic Diversification Actions:

- 5.4.5.16 YG Department of Tourism & Culture has identified the need for additional parking within the downtown core to accommodate residents and visitors. A suitable site shall be identified somewhere within the downtown core. Preliminary locations which may warrant further investigation include Lot 1026 (north of community boat

launch) and CTFN C-33FS (south of Montana Services).

5.4.6 Governance & Cooperative Management

Carcross is an unincorporated community. As such it relies on YG to provide municipal services. The principal difference between unincorporated and incorporated status is the level of powers and autonomy for local decision making. For example, the decision about community service levels is made by YG. The local advisory councils, made up of community members, can advise the Minister of Community Services about their views, but the decision is in the hands of senior government.

Alternative local governance structures might increase local-decision making on issues, such as community service levels and, therefore, influence the ability of speed of implementing the LAP. However, an analysis of the opportunities and responsibilities associated with different governance options is outside the scope of this plan.

Governance & Cooperative Management Objectives:

- 5.4.6.1 To investigate options for a local governance structure compatible with community needs and aspirations to have a greater decision-making abilities.
- 5.4.6.2 To identify what process changes are required to implement the direction contained in the Carcross LAP in an efficient, transparent and accountable manner.

Governance & Cooperative Management Policies:

- 5.4.6.3 The LAP supports a review of local governance options and encourages South Klondike Advisory Council (SKLAC) to work with the YG and C/TFN to investigate options in a timely manner.

Governance & Cooperative Management Actions:

- 5.4.6.4 Review of local governance options.

5.5 LAND USE DESIGNATIONS AND POLICIES

The land use designations and policies described in this section apply specifically to the Carcross Land Use Map attached as **Schedule A**. The map shows future land use intents. The new Carcross area development regulations will be the primary implementation mechanism for land use designations and policies contained within in this section and must be developed consistent with the direction provided below. Land use designations and policies have been developed with the participation and input of YG, C/TFN and the local community.

Land Use Designation Objectives:

- 5.5.1 To provide land use designations which encourage the highest and best land use, ensure land use compatibility and promote community growth in a logical, orderly and sustainable manner.
- 5.5.2 To develop a common set of regulations applicable to all lands within the Carcross

LAP boundary while acknowledging the jurisdiction of the respective governments.

Land Use Designation Actions:

- 5.5.3 YG and C/TFN will jointly develop new area development regulations consistent with the Carcross LAP and in collaboration with SKLAC and the community at large.
- 5.5.4 SKLAC will periodically monitor Carcross LAP implementation and report progress to YG and C/TFN as well as to the community.
- 5.5.5 Review the Carcross LAP every 5 to 10 years to incorporate new information and evolving community values and priorities, subject to availability of financial resources.

The Carcross LAP has identified nine broad land use designations to meet future development needs:

- *Environmental Protection (EP)*
- *Residential (R)*
- *Country Residential (CR)*
- *Downtown Core Commercial (DCC)*
- *Highway Commercial (HC)*
- *Comprehensive Mixed Use (CMU)*
- *Community Use/Traditional Use (CU/TU)*
- *Light Industrial (LI)*
- *Future Development (FD)*

5.5.1 Environmental Protection (EP)

The purpose of this designation is to protect areas of ecological significance from incompatible development by preserving land largely in its natural state.

Land Use Designation Policies for Environmental Protection (EP):

- 5.5.1.1 Permitted uses include appropriate outdoor recreational activities.
- 5.5.1.2 Discretionary uses may include the installation of public utilities, fire risk reduction activities and additional recreational development (e.g., trails and interpretive nodes) considered compatible with Environmental Stewardship objectives.
- 5.5.1.3 No minimum lot size is required.

5.5.2 Residential (R)

The purpose of this designation is to provide for a range of housing forms intended for an urban setting with compatible accessory uses.

Land Use Designation Policies for Residential (R):

- 5.5.2.1 Nature of permitted uses include a range of housing forms (e.g., single-family, duplex and multi-family dwellings).
- 5.5.2.2 Recommended minimum lot size shall be 465.0m².
- 5.5.2.3 Recommended maximum building height shall be 10.0m.
- 5.5.2.4 Home-based businesses, including B&Bs, are supported throughout the residential designation with business activities being secondary and subordinate to the

- residential function in size and scale of operation.
- 5.5.2.5 Home-based businesses within this designation shall not change the principal character of the lot on which it is operated, create undue noise or other disturbance, be unsightly, or include signage other than the name of the business or service offered.
 - 5.5.2.6 Living suites shall be permitted as accessory uses within the main building envelope provided they are secondary and subordinate to the main residential function.
 - 5.5.2.7 Community facilities as described in Section 5.5.7 shall be considered as discretionary uses.
 - 5.5.2.7 All multi-family projects shall be required to provide sufficient on-site parking, landscaping and setbacks to minimize the intrusion of the development on neighbouring properties.
 - 5.5.2.8 The level of servicing to be provided in residential areas shall be determined through completion of a long-term community servicing study (Policy 5.4.1.10).

5.5.3 Country Residential (CR)

The purpose of this designation is to provide for single-family residential development in a rural environment with compatible accessory uses.

Land Use Designation Policies for Country Residential (CR):

- 5.5.3.1 Nature of permitted uses include single-family dwellings.
- 5.5.3.2 The recommended minimum lot size for new country residential development shall range from 5,000m² to 8,000m².
- 5.5.3.3 Recommended maximum building height under this designation shall be 10.0m.
- 5.5.3.4 Home-based businesses shall be supported throughout country residential areas where the business activity is secondary and subordinate to the residential function in size and scale of operation.
- 5.5.3.5 The range of supported home-base business activities, including B&Bs, shall reflect the larger minimum lot size and lower potential for nuisance when compared to the smaller lot on the Residential designation.
- 5.5.3.6 Notwithstanding 5.5.3.5, home-based businesses within this designation shall not change the principal character of the lot on which it is operated, create undue noise or other disturbance, be unsightly or include signage other than the name of the business or service offered.
- 5.5.3.7 Minor agricultural pursuits (e.g., personal livestock and greenhouses) shall be permitted as assessory use.
- 5.5.3.8 Living suites shall be permitted as accessory use within the main building envelope provided they are secondary and subordinate to the main residential function.
- 5.5.3.9 Detached guest cabins shall be permitted as accessory use provided they are secondary and subordinate to the main residential function. Permanent habitation in guest cabins is not supported as they are intended for temporary visitor use only.
- 5.5.3.10 Community use facilities as described in Section 5.5.7 shall be considered as

discretionary uses.

- 5.5.3.11 It is assumed that the current level of servicing will be maintained for existing and future country residential developments. However, this shall not preclude the consideration of increasing servicing standards should new information or opportunities become available.

5.5.4 Downtown Core Commercial (DCC)

The purpose of this designation is to reinforce the compact, mixed-use nature of the downtown core in a manner which is consistent with the community's historic and small-town character.

Land Use Designation Policies for Downtown Core Commercial (DCC):

- 5.5.4.1 Nature of permitted uses generally supports commercial and institutional uses that are compatible with existing developments. Additional consideration is given to compatible mixed commercial – residential use development forms that provide residential dwelling units (including staff accommodation) on above ground level.
- 5.5.4.2 The residential function shall be incidental and subordinate to the commercial activity.
- 5.5.4.3 Highway and automobile-oriented commercial activities, such as service stations, shall not be permitted in this designation.
- 5.5.4.4 Recommended minimum lot size for this designation shall be 400m².
- 5.5.4.5 Recommended maximum building height shall be 12.0m.
- 5.5.4.6 Temporary commercial uses to accommodate seasonal business operations shall be permitted, subject to the following conditions:
- activities shall acquire all necessary permits and licenses and be permitted by the respective property owner ;
 - activities cannot be detrimental to property or improvements in the surrounding area or to public health and safety;
 - shall be located so as not to interfere with the normal operations of any permanent use located on the property or adjacent properties;
 - if the property is undeveloped, it shall contain sufficient land area to allow the temporary use or structure to occur, as well as any parking requirements that may be associated with the temporary use; and
 - all structural elements associated with the activity, including signage, shall be removed when the activity ends.
- 5.5.4.7 The level of water and sewage servicing to be provided in the downtown areas shall be determined through completion of a long-term community servicing study (Policy 5.4.1.10).

5.5.5 Comprehensive Mixed Use (CMU)

The purpose of this designation is to encourage comprehensive developments that complement surrounding land uses while promoting vibrant, liveable, mixed-use designs in both built structures and overall neighbourhood development form.

Land Use Designation Policies for Comprehensive Mixed Use (CMU):

- 5.5.5.1 Permitted uses include a range of housing forms (e.g., single-family, duplex and multi-family dwellings), complementary tourist-commercial and general commercial activities (e.g., retail, restaurants, office, etc.) as well as community facilities (see Section 5.5.7).
- 5.5.5.2 All multi-family projects shall be required to provide sufficient on-site parking, landscaping and setbacks to minimize the intrusion of the development on neighbouring properties.
- 5.5.5.3 Mixed-use development forms shall be incorporated in both the vertical plane (i.e., commercial/residential uses within a single building envelope) and the horizontal plane (i.e., commercial and residential uses site by site within one or on adjacent lots.)
- 5.5.5.4 Highway and automobile-oriented commercial activities, such as service stations, are not permitted in this designation.
- 5.5.5.5 Recommended minimum lot size shall be 465.0m².
- 5.5.5.6 Recommended maximum building height shall range between 10.0m to 15.0m, to be further defined through the new area development regulations. The building height restrictions shall consider sightlines to surrounding lake and mountain areas.

5.5.6 Highway Commercial (HC)

The purpose of this designation is to accommodate highway and tourist-service commercial land uses.

Land Use Designation Policies for Highway Commercial (HC):

- 5.5.6.1 Nature of permitted uses support tourist and highway commercial and retail services consistent with current uses in the designation.
- 5.5.6.2 Notwithstanding 5.5.6.1, commercial activities which may potentially detract from vitality and viability of the downtown commercial area shall be discouraged.
- 5.5.6.3 Staff accommodations shall be permitted as accessory uses, subject to appropriate zoning regulations.
- 5.5.6.4 Recommended minimum lot size for this designation shall be 2500m².
- 5.5.6.5 Recommended maximum building height shall be 10.0m.
- 5.5.6.6 Regulations shall consider landscaping, signage and or building facade provisions to discourage highway strip appearances.

5.5.7 Community Use / Traditional Use (CU/TU)

The purpose of this designation is to accommodate the development of land for purposes related to essential community services such as governance, health, education, religion, recreation and utilities. On Settlement Lands, this designation may also accommodate equivalent First Nation traditional land uses.

Land Use Designation Policies for Community Use / Traditional Use (CU/TU):

- 5.5.7.1 Permitted uses shall include health centres, government buildings, fire halls, public utility buildings and structures, police stations, senior citizens homes, nursing homes, churches, recreational structures, community gardens and any other use of similar nature.
- 5.5.7.2 Permitted uses upon Settlement Lands shall also include First Nation traditional use activities to be determined by C/TFN during preparation of the new area development regulations.
- 5.5.7.3 No minimum lot size is required.
- 5.5.7.4 Recommended maximum building height shall be 12.0m.
- 5.5.7.5 One caretaker residence shall be permitted as accessory use, subject to appropriate zoning regulations.
- 5.5.7.6 All projects shall be required to provide sufficient on-site parking, landscaping and setbacks to minimize the intrusion of the development on neighbouring properties

5.5.8 Light Industrial (LI)

The purpose of this designation is to accommodate light industrial development and activities in a manner which responds to potential issues of nuisance, public health and safety or land use incompatibilities.

Land Use Designation Policies for Light Industrial (LI):

- 5.5.8.1 Permitted uses generally includes industrial activities, such as: public works garages and maintenance yards, warehousing and outdoor storage, light manufacturing, equipment assembly and servicing and other uses of a similar nature.
- 5.5.8.2 Recommended minimum lot size shall be 2,000 m².
- 5.5.8.3 Recommended maximum building height shall be 10.0m.
- 5.5.8.4 One caretaker residence shall be permitted as accessory use, subject to appropriate zoning regulations.
- 5.5.8.5 Discretionary uses shall include solid waste transfer stations, wastewater treatment facilities, recycling depots, railway maintenance yards.
- 5.5.8.6 Any industrial land uses occurring within the vicinity of the sewage lagoon shall consider measures to ensure land use compatibility with the nearby Carcross Gun & Rod Club.

5.5.9 Future Development (FD)

The purpose of the Future Development designation is to reserve lands in a largely natural state while maintaining flexibility for considering future land development options. Lands under this designation require further investigation of their development feasibility to determine if, when, and how development may occur.

Land Use Designation Policies for Future Development (FD):

- 5.5.9.1 Permitted uses include appropriate existing outdoor recreational activities.
- 5.5.9.2 Discretionary shall include the installation of low impact public utilities and fire risk reduction activities.
- 5.5.9.3 Any development proposal for future development designated land shall demonstrate compatibility with surrounding land uses.
- 5.5.9.4 Any development of future development designated land shall require an amendment to the Carcross LAP and the area development regulations including associated public review processes

5.6 LAND USE PLAN

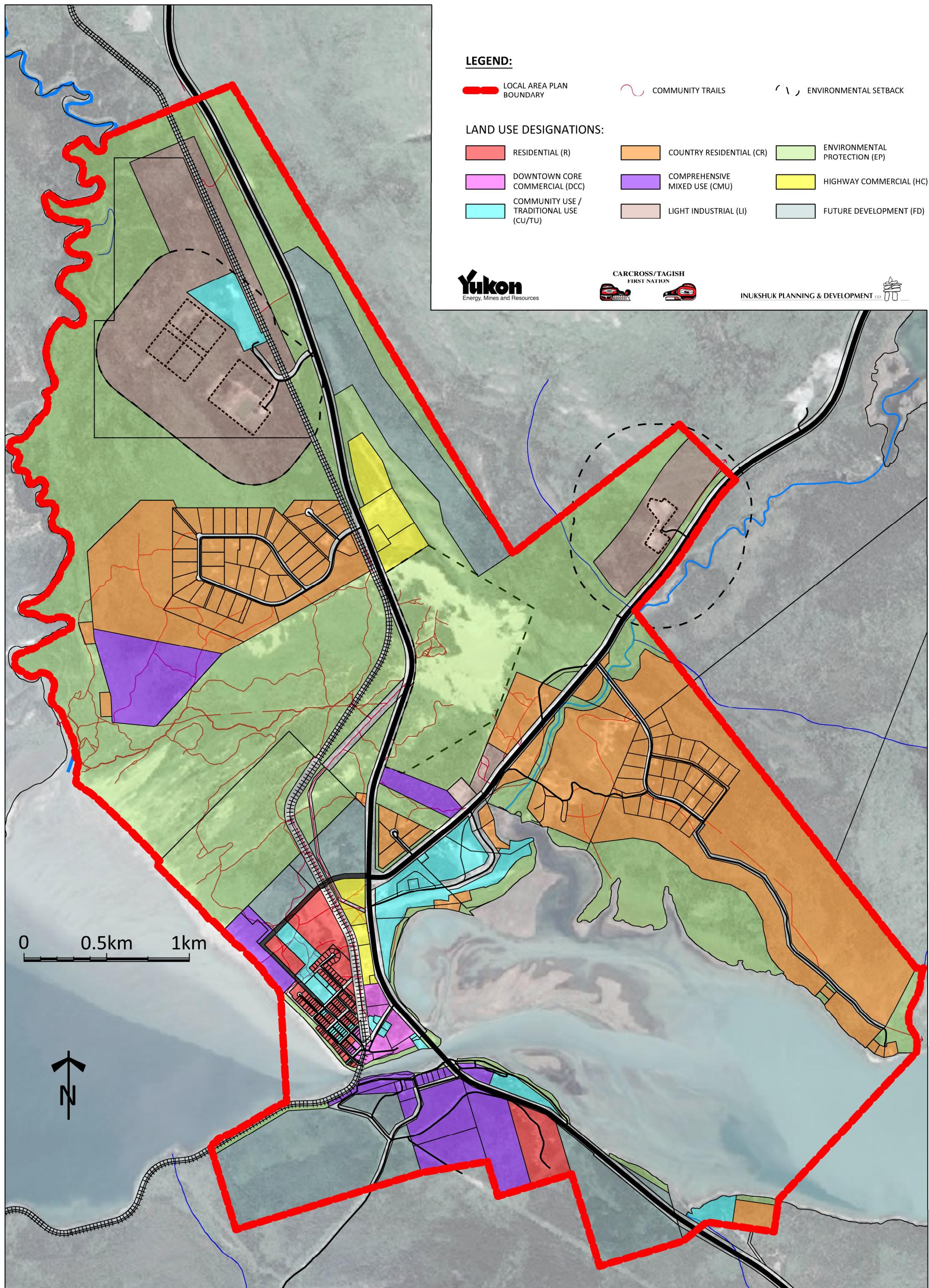
The land use plan developed for the Carcross Local Planning Area is attached as **Schedule A**. It is comprised of the various land use designations discussed in Section 5.5.

5.6.1 Interpretation of Land Use Boundaries

The land use designation boundaries illustrated in **Schedule A** for public lands have been interpreted from aerial photography, existing regulatory (zoning) boundaries, generally available resource mapping at different scales and visible site conditions. The boundary lines between public and private land is determined by the legal plan of survey. The land use designation boundaries as shown on **Schedule A** are for general land use planning policy purposes only.

CARCROSS LOCAL AREA PLAN

SCHEDULE A - LAND USE MAP



6.0 IMPLEMENTATION

Effectively implementing the Carcross Local Area Plan will require a number of actions.

Action	Policy Description	Priority	Timeframe
Replace <i>Carcross General Development Area Regulations</i> with new area development regulations for the LAP planning area Lead Jurisdiction: YG EMR Land Planning Branch (LPB) Implementation Support: C/TFN, Heritage, Lands and Natural Resources (HLNR) Branch; SKLAC & community stakeholders	5.5.3	High	1 year
Consideration of heritage design guidelines in coordination with preparation of new Carcross area development regulations Lead Jurisdiction: YG EMR LPB, YG Tourism & Culture Implementation Support: C/TFN HLNR, SKLAC & community stakeholders	5.4.3.11	High	1 year
Community assessment for development of Carcross Heritage Management Plan Lead Jurisdiction: YG Tourism & Culture; C/TFN HLNR Implementation Support: YG EMR (LPB), YG Community Services, SKLAC & community stakeholders	5.4.3.12	High	1 year
Commissioning of a long-term community servicing study Lead Jurisdiction: YG Community Services Implementation Support: C/TFN, SKLAC & community stakeholders	5.4.1.19	High	<3 years
Construction of alternate access route Lead Jurisdiction: YG Community Services Implementation Support: C/TFN, SKLAC & community stakeholders	5.4.1.18	High	<3 years

Action	Policy Description	Priority	Timeframe
Explore mechanisms for managing motorized recreational activities Lead Jurisdiction: YG EMR, C/TFN, SKLAC and community stakeholders Implementation Support: YG Community Services, YG Environment, RCMP	5.4.4.19	High	<3 years
Formation of a cemetery planning committee to oversee new cemetery site selection and implementation. Lead Jurisdiction: SKLAC and/or C/TFN Implementation Support: YG Community Services & YG EMR Land Management Branch	5.4.4.20	High	<3 years
Creation of a Carcross Community Trail Plan Lead Jurisdiction: C/TFN and/or SKLAC Implementation Support: YG Community Services,	5.4.4.18	Medium	<5 years
Remediation of the Carcross Waterfront Lead Jurisdiction: Proponent/Developer & YG Community Services Implementation Support: YG Environment, SKLAC & community stakeholders	5.4.4.21	Medium	5-10 years
Development of a comprehensive Fire Protection Strategy Lead Jurisdiction: YG Community Services, Wildland Fire Management Implementation Support: C/TFN, SKLAC	5.4.2.18	Medium	5-10 years
Complete a community flood risk assessment along Lake Bennett, Nares Lake and Natasheeni Lead Jurisdiction: YG Environment Implementation Support: YG EMR, YG Community Services, C/TFN, SKLAC	5.4.2.19	Medium	5-10 years

Action	Policy Description	Priority	Timeframe
Complete a flood risk and fish habitat protection study from Choutla Lake to the mouth of Choutla Creek Lead Jurisdiction: C/TFN HLNR Implementation Support: YG Land Claims Implementation Secretariat, YG Environment	5.4.2.20	Medium	5-10 years
Update information identified contaminated sites and determine contaminated site remediation priorities Lead Jurisdiction: SKLAC & community stakeholders Implementation Support: C/TFN, YG Environment	5.4.4.22	Medium	5-10 years
Identification of a suitable parking location in the downtown area Lead Jurisdiction: YG EMR LPB Implementation Support: SKLAC, C/TFN, YG HP&W, YG Tourism & Culture	5.4.5.16	Medium	5-10 years
Review of local governance options Lead Jurisdiction: SKLAC and community stakeholders Implementation Support: YG Community Services	5.4.6.4	Medium	5-10 years
Pursuit of potential land acquisition opportunities for community development purposes Lead Jurisdiction: YG EMR Lands, C/TFN HLNR Implementation Support: YG Community Services	5.4.1.26	High	Ongoing
Monitor Local Area Plan implementation Lead Jurisdiction: SKLAC Implementation Support: YG EMR LPB and C/TFN HLNR	5.5.4	High	Ongoing
Review and update Carcross Local Area Plan Lead Jurisdiction: YG EMR LPB and C/TFN HLNR Implementation Support: SKLAC and community stakeholders	5.5.5	High	5-10 years

7.0 PLAN REVIEW AND AMENDMENT

This is the first Local Area Plan for the Carcross area. Circumstances invariably change over time. This plan has a 10-20 year time horizon. New opportunities, issues and land management concerns will emerge during this period. They may be triggered by the availability of new resource information, completion of plan implementation actions and other matters not considered during initial plan preparation. Generally, such plan reviews are scheduled within 5 to 10 years, subject to available resources and depending on the level of land development activity, nature of land disposal pressures or Area development regulations amendment requests received.

Area development regulations are the primary method to implement the direction and policies set out in the Carcross LAP. They must be consistent with the approved plan. Where a requested amendment to those regulations would be inconsistent with the Carcross LAP, the plan requires to be amended first or considered concurrently with the request. While requests for amendments to either the Carcross LAP or the area development regulations are considered on their merits, such requests are generally considered premature unless they involve a significant amount of new information not available at the time of initial plan preparation.

The *Yukon Environmental and Socio-economic Assessment Act* also provides a mechanism for the consideration of the individual and cumulative impacts arising from specific development proposals. That process also considers whether a proponent's proposal is consistent with an approved local area or regional land use plan and requires the assessor to consider what actions might be taken to bring a proposal into compliance.

Plan amendment processes include public notification, government-to-government consultation between the C/TFN and YG, a requirement for a public meeting and a minimum 30-day comment period. Where the proposed amendment would affect only Settlement or Commissioner's Land, the government having jurisdiction for the land in question is the decision-making authority. The respective government will notify the applicant, the other government and residents of the planning area of the decision reached. Where the consequences of an amendment request affect both governments, best efforts will be made during the review process to arrive at a consensus decision.

Automatic Triggers for Plan Review and Possible Amendment:

- A proposal to re-designate substantive areas of public or private lands within **Schedule A** to uses not contemplated in the Carcross LAP (e.g., as result of the long-term community servicing study).
- Once the reservation for airport purposes is removed from the Carcross Airport Parcel as described in Section 22.9., Schedule A, Part 1, Subsection 13.0 of the C/TFN Final Agreement.

GLOSSARY²⁵

Accessory Building	A separate building or structure on a parcel of land, secondary to the principal use of the site. Examples include garages, gazebos, garden sheds, storage sheds, etc.
Accessory Use	Uses permitted in a land use zone which are incidental and subordinate to the primary use.
Alternate Access	When used in this plan, it refers to a second access from the highway to downtown Carcross.
Area Development Regulations or Zoning	Zoning regulations define guidelines and standards for how properties can be used. They are created under the <i>Area Development Act</i> with the purpose of providing for orderly development, protecting areas from incompatible land uses, and the establishment of appropriate development standards.
Best Management Practices	Methods or techniques found to be the most effective and practical means in achieving an objective (e.g., minimizing land development impacts on wildlife habitat).
Building Envelope	The skin of a building – including the windows, doors, walls, foundation, basement slab, ceilings, roof and insulation – that separates the interior of a building from the outdoor environment.
Commissioner's Land	Land controlled, managed and administered by the Government of Yukon.
Community Character	The image of a community or area as defined by factors such as built environment, natural features and open space elements, type of housing, architectural style, infrastructure and/or the type and quality of public facilities and services.
Contaminated Site	A site is contaminated if the land use is agricultural, commercial, industrial, park or residential, and the concentration of any contaminant in the soil of the site is greater than or equal to standards defined by the <i>Yukon Contaminated Sites Regulation</i> .
Critical Habitat	Under the federal <i>Species at Risk Act</i> , the habitat that is necessary to maintain a wildlife species and that has been identified as critical in the recovery strategy, or in the action plan for that species.
Developable Land	Land that is suitable as a location for structures and that can be developed free of significant impact on natural areas.
Discretionary Use	Uses that may be permitted in a particular land use zone, but which are subject to individual application review and public consultation.
Fee Simple	A legal term referring to property. It indicates that a landowner has unqualified rights to control, use, and transfer their property at will.

²⁵ Portions of the following are reproduced from the City of Whitehorse Bylaw 2012-20 and The Institute for Local Government (2010) *Understanding the Basics of Land Use and Planning: Glossary of Land Use and Planning Terms*.

Growth Management	The use of a wide range of techniques to determine the amount, type, and rate of development desired by the community and to channel that growth into designated areas.
Guest Cabin	A detached accessory building used solely for the purpose of providing separate temporary accommodations for family or guests.
Historic Preservation	The preservation of historically significant structures and neighborhoods to facilitate restoration and rehabilitation of the building(s) to a former condition.
Home-Based Business	A small business that is operated from the home owner's residence which does not generally generate traffic.
Infill	Development of vacant or underutilized land (usually individual lots or leftover properties) within areas that are already developed. Usually infill development occurs where infrastructure is easily accessible.
Infrastructure	Public services and facilities like sewage-disposal systems, water-supply systems, other utility systems, schools, roads, bicycle and pedestrian facilities, and transit systems.
Invasive Species	A species that does not naturally occur in a specific area and whose introduction does or is likely to cause economic or environmental harm or harm to human health.
Land Tenure	Land tenure systems determine how property rights to land are to be allocated (e.g., right to use, control and transfer land) as well as associated responsibilities and restrictions.
Land Use	The way land is developed and used in terms kinds of activities that occur (e.g., agriculture, residential or industrial).
Land Use Compatibility	The characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by density; pedestrian or vehicular traffic generated; volume of goods handled; and environmental effects like noise, vibration, glare, air pollution, or radiation.
Land Use Designation	Land use designations are used to allocate different areas of land for different uses (e.g., residential and commercial) with associated sets of management policies. Land use designations specified in a local area plan are implemented through zoning regulations that provide more details on what can or cannot occur in each zone, including individual properties.
Land Use Planning	The process of making decisions regarding appropriate uses for land and determining which uses are compatible, so that land can be used in a sustainable manner to satisfy multiple needs.
Laws of General Application	Refers to a clause in the Yukon First Nation Self-Government Agreements which states that Federal and Territorial common law

	shall generally apply until the First Nation chooses to enact laws of a local or private nature.
Living Suite	A separate, self-contained dwelling within a single detached home containing toilet, bathroom, sleeping and living areas and cooking facilities.
Local Governance	Decision-making for the community is done within the community (e.g., a municipality).
Lot Consolidation	The combining of two or more parcels, where a lesser number of parcels than originally existed is thereby created.
Lot Enlargement	An application to enlarge the boundaries of an existing titled property.
Lot Supply	The number of undeveloped parcels which are available at any given time for industrial, commercial or residential purposes.
Minimum Lot Size	The smallest size allowable for a single parcel of property under a zoning bylaw or a regulation.
Minor Agricultural Pursuit	Small-scale agricultural operations that can be carried out on a small tract of land, and includes nurseries, greenhouses, market gardens, bee-keeping and personal livestock.
Mixed Use	Properties on which various uses like office, commercial, institutional, and residential are combined in a single building or on contiguous properties with functional interrelationships and a coherent physical design.
Multi-Family Unit	Freestanding buildings composed of two or more separate living units, with each unit having its own bedroom, kitchen and bathroom facilities.
Objective	A specific statement of desired future condition toward which a community will work towards in order to achieve a broader goal.
Open Space	Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of conservation of natural resources, outdoor recreation, or public health and safety.
Permitted Use	The intended or primary use of a lot in a particular land use zone.
Plan Amendment	The process of formally altering or improving a local area plan to reflect new information, a change in existing conditions, or to accommodate a development proposal that results in a substantial change to specific designations or policies contained within the plan.
Policy	A statement of a public body that forms the basis for enacting legislation or making decisions. Does not have the force of law.
Precautionary Principle	States if an action or policy has a suspected risk of causing harm to the public or to the environment, and where scientific knowledge on the matter is lacking, the action or policy shall not be carried until sound

	evidence can prove it is not harmful.
Principle	A general rule or guide to action at the top of the planning hierarchy.
Rehabilitation	The repair, preservation, and/or improvement of existing structures, such as dilapidated buildings or substandard housing.
Remediation	The treatment of material to lower the concentration of contaminants to levels below those specified in the <i>Yukon Environment Act</i> and <i>Yukon Contaminated Sites Regulations</i> .
zoning Amendment	An amendment to the map and/or text of a zoning regulation to effect a change in the nature, density, or intensity of uses allowed in a zoning area and/or on a designated parcel or land area.
Right-of-Way	A legally surveyed right of passage over an area of land.
Riparian Area	Transition area between stream and lakeshores and the forest. These areas are particularly environmentally sensitive because they are used more often by a greater number of wildlife species than any other area and shall have special consideration in land use and resource development planning.
Servicing Standard	Used by public agencies to measure the quality or efficacy of a municipal service like water, sewage, emergency response, or the performance of a facility like a street or highway.
Setback	The distance which a building or other structure is set back from a street or road, a property line, a river or other stream, a shore or flood plain, or any other place which needs protection.
Settlement Land	Land controlled, managed and administered by a Yukon First Nation.
Traditional Territory	Generally defined area of the Yukon that the people of a First Nation traditionally used. A First Nation does not own its Traditional Territory, but the First Nation and its beneficiaries have a number of rights within their Traditional Territory, both on and off of Settlement Land.
Traditional Values	Refers to those beliefs, moral codes, activities and land uses, governance and community structures that are passed down from generation to generation within a culture or community.
Unincorporated Community	A region of land that is not governed by its own local municipal corporation, but which is instead administered as part of larger administrative divisions, such as a general development area.
Wetland	A land where the water table is at, near or above, the surface. These environmentally sensitive areas provide important habitat for a large number of wildlife species and need special consideration in land use and resource development.

CARCROSS LOCAL AREA PLAN

SCHEDULE A - LAND USE MAP

