



CARCROSS LOCAL AREA PLAN



Situation Analysis

June 9, 2011

Prepared by
Inukshuk Planning & Development LTD.

in association with
EDI Environmental Dynamics INC.

Carcross Local Area Plan Situation Analysis

1.0 Introduction

This Situation Analysis is intended to assist the Planning Committee in organizing your thoughts about how you want to move forward with the Local Area Plan. It summarizes relevant background information including the results of the Values and recently completed Vision workshops. It also provides an outline of issues and opportunities that are evolving from the feedback received.

The next step is for the Planning Committee to work through the criteria that should be used to evaluate draft plan options. The Planning Committee also has to give direction to the consultant on which issues and opportunities should be explored in more detail over the summer in developing plan options. The key here is to focus on those matters that reflect core values and the framework set out in the community vision. Core values and the draft vision statement are set out below in **Figure 1 & 2**:

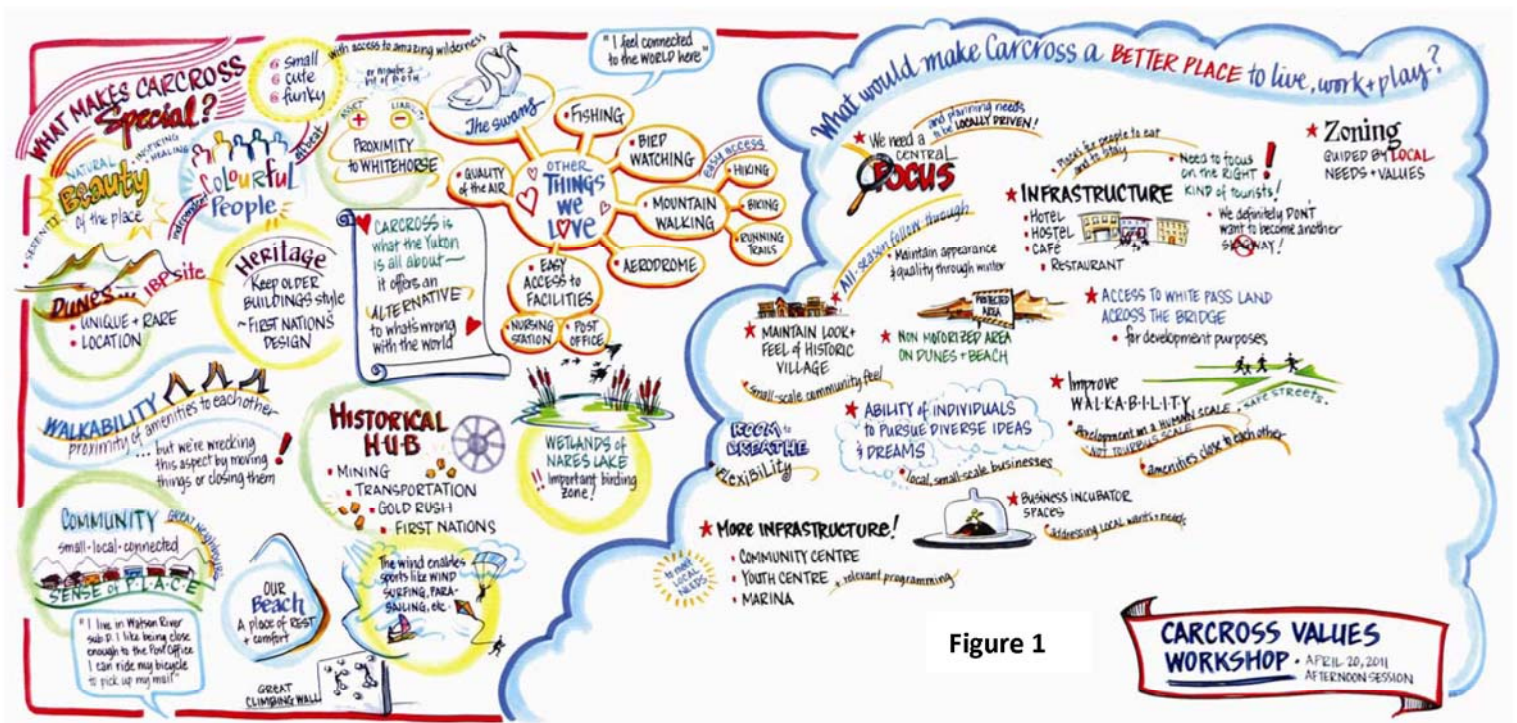


Figure 1

Community members told you that they value:

- Being close to nature, surrounded by water and mountains, peace and quiet
- The outdoor recreation choices available and their undeveloped potential
- Small town lifestyle and “colourful” people
- Size, scale, style and character of buildings
- Living history and Tagish/Tlingit cultures
- The potential to influence how a stronger, year round economy can be built



Figure 2

The draft Vision Statement provides a clear connection between the values expressed earlier and the desired outcome of where the community wishes to get to by 2030. The underlying key themes are reflected in the words outlined in red. Put plainly, a unified community is one where all are working together in a steady, positive manner. It involves finding the balance between collective stewardship responsibilities (environment, history, and culture), removing barriers to local economic development and ensuring the type, scale and pace of growth achieved is consistent with community goals. How a community grows is as important as where it occurs and the types of activities it involves. When a community grows too quickly, both land values and costs rise. This can result in displacement of some, demands for more or better infrastructure by others and unintended consequences such as higher taxes, land shortages and divisive land allocation conflicts.

It means facing up to social issues undermining community unity and finding the balance between growth and development with preservation of the very qualities that make Carcross a good place to live, work and play. It requires a holistic approach that creates pride of place and measures prosperity in true community development terms. This implies the Local Area Plan must pay attention to the issues and opportunities that will shape the pace, scale and type of future development. It also means that the Planning Committee needs to give careful attention to the mechanisms for plan implementation. First it is important to build trust, develop local governance capacity and encourage local entrepreneurship. Priorities need to be set with measurable milestones. Every citizen needs to see the merits of land use planning and the tangible benefits that can be achieved by working together with a common vision.

Successful land use plans are “living” documents. They contain enough internal flexibility to remain relevant over time and continue to evolve as they are implemented. The vision statement provides a sense of direction as well as a snapshot of the desired end state. The vision statement is your roadmap.

Our next task over the summer is to develop plan options and evaluate them for “best fit” with the overall plan vision using the agreed upon evaluation criteria.

The options are built from plan principles, goals, and objectives that are translated into policies and measurable action steps. In terms of physical land use controls and management, the main implementation mechanism involves amending the Area Development Regulations. They will be edited and updated once the Local Area Plan receives approval in principle.

2.0 Just the Relevant Facts Please!

In this section, we summarize the existing conditions and context that frame how the community functions today. It includes natural and man-made constraints that limit community development opportunities as well as a description of the issues and barriers that will influence how the community moves forwards to meet common goals.

2.1 Land Use & Land Ownership

The following table summarizes the main land ownership within the LAP boundary.

Main Land Ownership	Area (ha)	% of Total Gross Area	% of Total Net Area
Government of Yukon	860.2	41.1%	50.1%
Carcross/Tagish First Nation	458.9	21.9%	26.7%
White Pass & Yukon Route/British Yukon Railway properties	157.5	7.5%	9.2%
Private/Miscellaneous	239.8	11.5%	14.0%
Water Surface area	377.8	18.0%	N/A
Total Gross L/Water area within LAP boundary	2,094.2	100%	100%

Table 1: Land Ownership

When you deduct the water component, the net land area is approximately 1,716.4 ha of land with the Yukon and First Nation governments controlling over 75% followed by the railway company. Lands owned by the Government of Yukon include lands reserved for specific purposes such as the 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. This is not the case with CTFN lands. Most were selected through the land claims process with specific intentions in mind even though that may not be reflected in the current zoning. White Pass lands include lands used to support their railway and sternwheeler boat operations and land acquired both through the original town survey and over the years for which no clear purpose is apparent. The most relevant considerations for this planning exercise are:

- 3 property owners control 86% of the land within the planning boundary;
- Each of the three main property owners has under-utilized land with significant development potential as well as natural development limitations and servicing constraints;
- For the community to grow, each of these property owners has a role to play in meeting future community needs through development or redevelopment of under-utilized property assets.

- There are direct and inherent land use conflicts created by the current land ownership pattern and location of key properties that limit future options (e.g. location of sewage lagoons, routing of railway right-of-way, and land sensitivity to development)
- The greatest pressure will be on the Government of Yukon to release land for private development and ownership. First Nation land is owned in common and can only be leased.
- To preserve certain environmental values, trade-offs will be required and this may necessitate increased density, higher building heights and other land use trade-offs.

What these numbers do not take into account is actual development suitability or zoning which provides a more telling indication of actual land use.

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	Tourist Commercial	23.8	1.13%
H	Hinterland	1,398.3	66.77%
N/A	Water surface area	≈377.8	18.04%

Table 2: Land Use by Current Zoning

Source: Area Development Regulations

It is notable that two-thirds of the lands within the present plan boundary are designated “hinterland”. In practical terms this appears to be a “catch all” designation applied liberally to lands with no pre-determined purpose, as well as environmentally sensitive lands (including the Carcross Dunes & Desert). It also encompasses terrain unsuitable for development. In contrast there is little difference between the amount of land broadly designated for residential (5.98%) and commercial (6.5%). All other land use categories include only nominal amounts of land for industrial, institutional and parkland use.

Almost two-thirds of the designated residential land (80 ha) is being used for low density country residential development in a community with limited land suitable for residential development. The larger lot sizes are required for onsite septic systems for sewage disposal but are less expensive to develop and by default more affordable than conventionally serviced urban development. More compact and denser development is not feasible without a significant investment in new infrastructure which neither incorporated nor unincorporated rural Yukon communities can afford. While some preliminary work has been done by the Government of Yukon on potential costs, there is no evidence

that these studies have really considered the planning and community development ramifications over the long term.

Maintaining the status quo is not surprising in the absence of a current community plan with a clear vision of the future and champions with the political clout to lobby for the changes needed to move forward.

The following is a list of the main land dispositions within the plan boundary on record with Lands Branch. The majority are typical land reservations for specific uses required by government. Some appear to reflect an adhoc approach to decision-making over time directed more by convenience rather than consideration of future consequences or potential land use compatibility.

Land Tenure Disposition			
Number	Type	Purpose	Client Name
#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	Industrial	GOVERNMENT
#6	Reservation	Utility	GOVERNMENT
#7	Reservation	Garbage Dump	GOVERNMENT
#8	Reservation	Airport	GOVERNMENT
#9	Reservation	Parks & Campground	GOVERNMENT
#10	Lease	Residential	PRIVATE
#11	Lease	Residential	PRIVATE
#12	Reservation	Institutional	GOVERNMENT
#13	Reservation	Recreational	GOVERNMENT
#14	Easement	Utility	PRIVATE - THE YUKON ELECTRICAL CO. LTD.
#15	Reservation	Recreational	GOVERNMENT
#16	Reservation	Recreational	GOVERNMENT
#17	Lease	Commercial	CARCROSS/TAGISH FIRST NATIONS
#18	Reservation	Heritage	GOVERNMENT
#19	Reservation	Marine	GOVERNMENT
#20	Lease	Recreational	PRIVATE
#21	Reservation	Utility	GOVERNMENT
#22	Reservation	Bridgehead	GOVERNMENT
#23	Reservation	Institutional	GOVERNMENT
#24	Lease	Residential	PRIVATE, PRIVATE - KEHOE HOLDINGS INC.
#25	Reservation	Recreational	GOVERNMENT
#26	Reservation	Institutional	GOVERNMENT
#27	Reservation	Heritage	GOVERNMENT
#28	Reservation	Public Use	GOVERNMENT
#29	Agreement for Sale	Recreational	PRIVATE
#30	Lease	Marine	PRIVATE

Table 3: Land Tenure Dispositions

Source: YG Lands Branch

The key messages are:

- The community has little room to grow within the current plan boundary for both man-made and natural reasons;
- The issues of density, building height and under-utilized land will have to be faced and they are directly connected to infrastructure supply and land ownership;
- There are numerous inconsistencies between actual land use, land use suitability and the land use zoning being applied; and
- The manner and rate of growth will be dictated by the ability to find a compromise and suitable trade-off between land protection responsibilities and land required to foster future development. The areas of greatest potential conflict include the community airstrip, and protection of the special features that comprise the dunes and desert ecosystem.

2.2 Environmental Considerations

EDI evaluated the environmental considerations relevant to Local Area Plan preparation. They started at the larger regional scale first before focusing in on the implications for land use planning within the Local Area Plan boundary. Their findings are summarized below and on the maps in the appendices.

- **Terrestrial Ecosystem**

The Carcross area contains an active sand dune habitat composed of species that are rare and, in some cases the dune habitat is their only known global distribution. Several of the species that occupy this habitat are of conservation concern. Baikal sedge (refer to map) is listed as threatened under the *Species at Risk Act* (SARA). A draft Baikal sedge recovery strategy is available. Six species of invertebrates have been discovered whose known global distribution is only the Carcross dunes, and there are another 3 species of invertebrates that are restricted to two or more Beringia dune fields.

The implications for land use planning are:

- The dunes and desert are a single interdependent ecosystem and need to be planned and managed as a unit;
- The presence of unique species and species at risk are part of what makes the community special and their conservation and protection would be a unique and marketable attraction in their own right;
- Protection of these features would require a severe restriction on the type and nature of present recreational use which it could be argued is equally unique;
- It would be very difficult to make a case to protect the area in its entirety, as there has already been significant encroachment. Boundary and buffer definition has significant implications for future growth and may require acquiring some private and First Nation land through purchase or land swaps.

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 (SLWCC) 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 LAP boundary is included within an area identified by Local/Traditional Knowledge as a caribou crossing point.

Moose are a valued species in the area (refer to map) and are of local conservation concern. Reducing mortality is the main issue for moose. Moose mortality is primarily a wildlife management issue and cannot be addressed through the LAP.

Grizzly bear mortality is the main issue limiting bear abundance in the Southern Lakes region. Avoiding future mortality of bears is a key concern. Planning initiatives that limit human contact with bears, respect bear movement corridors, limit sprawl and manage garbage reduce the risk of bear mortality from human use/bear interaction and increase public safety.

- **Fisheries**

The Carcross Local Planning Area contains fish bearing water bodies/watercourses (refer to map). Existing fisheries information is limited. 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 the Natasaheeni River strongly suggests that spawning takes place in the vicinity. Although spawning activities have not been documented in the adjacent shorelines of Nares and Bennett Lakes, it is possible that spawning may occur in these areas (where suitable habitat exists). Traditional fish camps and fish spawning areas were identified on the Local/Traditional Knowledge maps. Maintaining water quality and foreshore riparian vegetation will protect fish values in the Local Planning Area. Climate change modelling suggests lake levels will rise which means carefully mapping the ordinary high water mark (OHWM) and ensuring a minimum 30.4m environmental setback from this point to the property line should be maintained as a minimum.

- **Migratory Birds Staging Areas**

The Nares River and 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 location of these staging areas is provided on the Wildlife Key Areas map and the Local/Traditional Knowledge map.

- **Local & Traditional Knowledge**

Maps with Traditional Use and Values were provided by the Carcross/Tagish First Nation. Key features were digitized by EDI that were within close proximity to the LAP boundary. A variety of values were recorded that provide the plan with spatially located areas, linear features and point locations (see attached map and tables). This information was incorporated into this summary document.

- **Contaminated Sites**

The following table identifies 8 contaminated sites within the local planning area.

Reference Number	Contaminated Site Name	Site Description	Site Status
CS02	Carcross Airport	Site between the airstrip and Nares Lake.	Unknown, no soil sampling has been done
CS03	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
CS04	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
CS05	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
CS06	Old Dump/ Sewage Lagoon	Site was used as the old garbage dump and sewage lagoon.	Contaminated
CS07	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
CS08	Unit 1005, Tagish Ave	Yukon Housing Corporation property.	Contaminated
CS09	Lot 1006	Site of previous gas station facility.	Contaminated

Table 4: Contaminated Sites

Source: Yukon Environment

The records are disturbing because there does not seem to be an overall remediation strategy for the community as a whole. In part this is probably due to the fact that different agencies and owners are involved and remediation costs high. From a planning perspective, sites can be restored to various standards that determine the types of future uses that may be permitted after remediation to a given standard. However, if the costs are high, the tendency is to remediate to the lowest acceptable standard (e.g. industrial) that may not be consistent with what might be the highest and best use for the site in the future were it not contaminated.

3.0 Land Use Planning Considerations

The following is a brief discussion of the challenges the Planning Committee members need to wrestle with. The intent is to help the committee decide what direction to give the planning consultant and which topics and themes have priority.

3.1 Community Growth & Governance

Conventional wisdom would suggest there are two choices for a governance structure – retain unincorporated status or become an incorporated community under the Municipal Act. Chief Mark Wedge in his remarks at the Vision Workshop noted that there may also be other options citing their own Land Claim Agreement which includes provisions that would allow consideration of another model.

In theory, incorporation is intended to empower more local control in decision making and give the municipality more “voice” in matters at the territorial level that affect them. Inevitably expectations rise and with it demands for more services, better infrastructure etc all of which increase taxes. As an unincorporated community, Carcross coasts along under the radar paying low taxes in exchange for minimum services. There is also always someone else to blame when things need to be repaired and replaced. There is no incentive to strengthen the tax base or take ownership of community problems or pursue opportunities and the community remains complacent and dependent rather than alive, unified and focused. It is noteworthy that both the draft vision statement and many individual comments expressed during the workshops had a similar theme. If the community does not take the initiative to decide on its future it will be only a matter of time before others discover the potential and move in. This occurs somewhere on a regular basis throughout the world.

The Carcross Tagish First Nation has reached the point where it realizes that a far-sighted and concrete plan for economic diversification is needed and is working towards that end. As a key landowner with more than half of the population they have a vested interest in building a healthy, stable and economically viable community. The larger underlying issue is can both halves of the community bridge the gap to find enough points of common unity to create a vibrant cohesive community.

3.2 Community Economic Development

Carcross is currently too small to build a diversified economy and sustainable tax base. Even if it were to double in size to 850-900 residents it will have difficulty supporting the range of year round businesses that some would expect.

Although upwards of 100,000 + visitors pass through the community during the 120 day summer visitor season all they do is stop briefly and spend little money in the community. There has to be more to see and do and subsequently more reasons to stay longer or visit more often throughout the year. Tourism however is only one leg on the economic stool. If the community wants to grow it must diversify, taking advantage of the assets it has and removing the barriers and attitudes that are impeding initiative and progress.

During the workshops there were many references to creating local employment and not becoming “another Skagway”. It was stated that Haines appears to have made that a conscious choice. It was also noted that while Skagway had given up some aspects of community life in catering to the cruise ship industry and outside business interests, it also had \$20M in the bank for a rainy day.

The planning issue is as much about the nature, scale and pace of development as it is about community character. The Planning Committee question is: *what mechanisms need to be in the Local Area Plan to help manage change effectively without compromising all the things we value about living in Carcross?*

In these circumstances, the planning issue is do you want to encourage mixed use development and if so in what land use zones? What types of land uses are appropriate? For example, encouraging ground floor retail commercial uses in the downtown core with offices or residences above or creating incubator spaces to encourage local entrepreneurship are examples of possible responses that if supported would necessitate changes in the Area Development Regulations to make happen.

3.3 Issues & Opportunities

An overview of issues and opportunities is reflected in the map in the appendices. The intent of this map is to show general spatial relationships and stimulate discussion by identifying examples of issues and opportunities the Local Area Plan should consider. These range from specific questions which involve difficult choices such as protection of the sand dunes and desert versus their development to issues related to re-use and protection of other community values. The spatial boundaries shown are approximate for illustrative purposes only.

Some issues such as protection of natural watercourses may involve physical setbacks, limits on types of permitted activities and establishment of management policies. The setbacks shown around the sewage lagoons and landfill illustrate the zone of influence that these activities have on neighbouring land uses.

Gateway opportunities are the places where the community may want to establish a sense of arrival in the community. In the case of Montana Mountain the location for the “gateway” function is the main access point up the mountain itself to the recreation potential currently being developed.

The main planning issues are:

- Where should new residential, commercial and industrial development go?
- Should the sand dunes be preserved in their entirety or some encroachment be allowed?
- How can the plan ensure that infrastructure services can be extended in a logical, orderly and affordable manner?
- Should certain land uses be relocated to free up land for other purposes?
- Where and how should the community grow?

The map is also helpful in understanding how past decisions may have influenced either positively or negatively the future options available today. For example the railroad and highway routing are manmade fixtures that won't change but the highways compound and rail support facilities could.

3.3 Key Questions for Planning Committee Consideration

There are three core questions the Planning Committee has to think about. These questions will shape what goes into the Local Area Plan and the level of detail required. The first question is - *what really needs to change to move forward?* This carries with it the second question - *is the community really ready to change and move away from the status quo?* Our underlying sense is that some are while others are suspicious of the consequences and remain sceptical. While this is not uncommon, it reinforces the need for visible, incremental evidence that the effort being expended on planning will generate the results the community wants. Understanding the nature of the barriers to change is also critical in developing strategies to mitigate fears, build consensus around possible solutions and generate positive results. As noted earlier, some difficult and unpopular choices will have to be made. Restricting recreational activity in the Carcross Desert area is one along with deciding how much of the desert and dune ecosystem should be protected or encroached upon for other purposes. The future of the airstrip, possible boundary expansion and governance form are all hot-button issues.

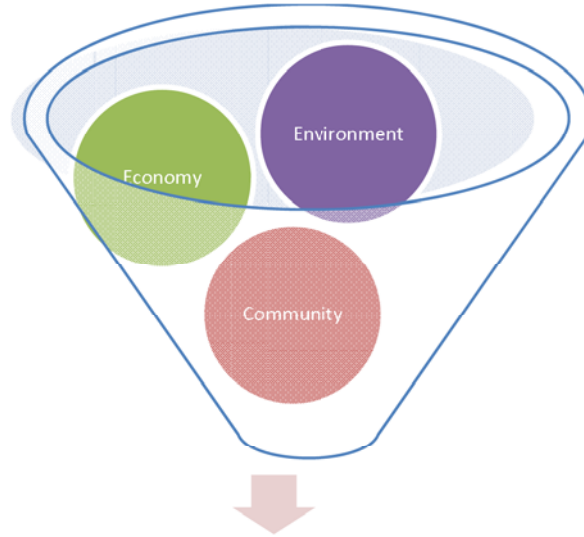
The third question relates to implementation expectations and how the community manages change. Building trust and commitment takes time, energy, partners and champions. The question is – *what steps need to be taken to ensure appropriate partners and plan champions are in place for successful plan implementation?* Change is a continuous process and it is always occurring. Key events can affect the scale, pace and nature of the changes that occur. In Carcross, examples of key events that influenced community life include the Gold Rush stampede of 1898, arrival of the railroad, WW2, the shutdown of the paddlewheel boats, completion of the South Klondike Highway, arrival of the cruise ship industry in Skagway and settlement of the Carcross Tagish First Nation land claim. All have left their mark. They have created new opportunities but also imposed constraints on future development that limit future choices.

○ Local Control <i>Is incorporation the solution to controlling our own destiny?</i>
○ Community Heritage & Culture <i>How do we preserve the character of our community?</i>
○ Heritage Buildings <i>Which do we save, repair or restore, and how can they be reused?</i>
○ Regulation <i>How much do we want or need?</i>
○ Economy <i>How do we create a viable downtown and year-round visitor destination?</i>
○ Dunes <i>How do we balance recreation and protection of sensitive ecosystems?</i>
○ Youth <i>Where are the facilities, programs and staff/volunteers?</i>
○ Community <i>How do we restore and celebrate our sense of community?</i>
○ Land Use <i>How can we make the most effective use of the land we have?</i>
○ Development <i>What type, scale and speed of development do we want?</i>

Table 5: Typical Community Concerns

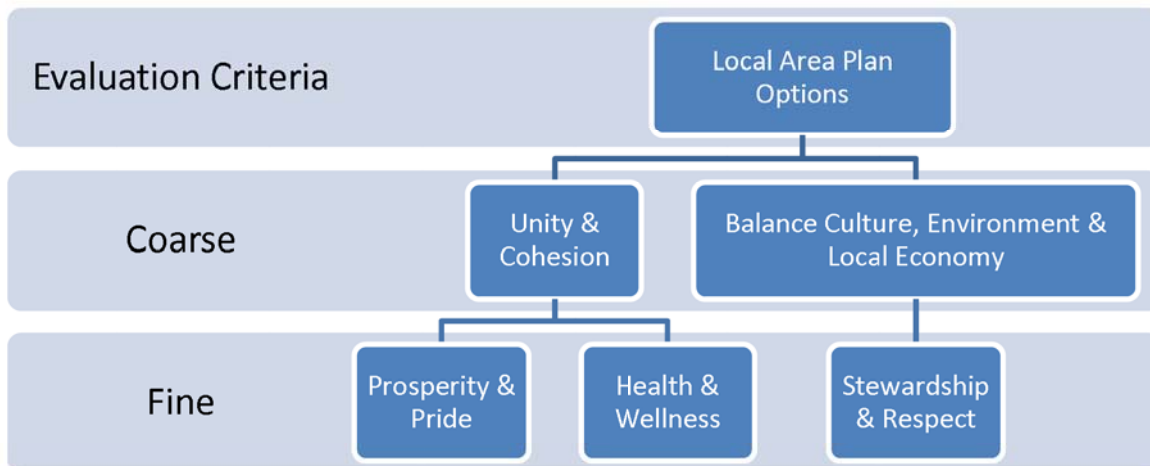
4.0 Discussion of Plan Evaluation Criteria

The objective here is to get general agreement on the evaluation criteria that will be used to explore options using a sieve approach. This allows a wide range of ideas to be explored and evaluated against the filters that run from coarse to fine or broad to more specific criteria.



Plan Options Framework

It is important to connect the evaluation criteria back to community values, the vision statement and plan goals. Here are examples of how this can be illustrated:



The coarse filters are intended to channel broad ideas surrounding issues and opportunities separating out the “non-starters”. The fine filters are more qualitative and used to narrow the options to arrive at the best fit.

The key consideration here is that for the Local Area Plan to be successfully implemented it must first be adopted by the Yukon and Carcross-Tagish First Nation governments. Thus an issue such as whether to incorporate or explore another form of local governance status would readily pass through coarse filters related to “unity & cohesion” because it supports the principle of local empowerment and control. It also speaks to core values community residents have talked about such as scalability and balance.

At the fine level there is the assumption that a stronger form of local governance will be more responsive to local needs and priorities. However, as discussed previously, this involves accepting more responsibility and most likely higher taxes at least in the transition stage until the local economy can generate an improved tax base. Similarly, as raised by Chief Wedge, there may be other forms of local governance that might be worth considering other than incorporation under the Municipal Act.

The component parts of what the Local Area Plan needs to encompass to achieve the desired end results can be organized around subject areas such as land use categories, broad themes and the types of questions posed in section 3.3. Options can be formulated around the strengths and weaknesses of different approaches using even more refined criteria to determine the best overall fit with plan direction.

The following are a list of possible evaluation criteria divided into coarse and fine filters:

Coarse Filters

- Compatibility with adjacent land use and land use zoning
- Compatibility with stated community environmental, heritage and cultural values
- Clear indication of majority community support
- Potential negative physical, social or cultural impacts can be mitigated
- No viable alternative site or route available for intended purpose
- Demonstrated scientific record of rareness or unique site qualities
- Consistent with and supported by community vision
- History of past use
- Required for essential public service/infrastructure
- Encourages re-use, reclamation, redevelopment of underutilized properties
- Supports local business development and diversification
- Identifies and protects environmentally sensitive lands
- Responds to climate change risks
- Provides access to land for a wide variety of land uses and purposes
- Stabilizes and expands the community tax base
- Minimizes sprawl
- Contributes to cost effective, straightforward and timely land management administrative procedures

Fine Filters

- Physical site suitability for intended land use
- Maintains public access to and along the lakeshore of Nares and Bennett Lakes, Watson River and Choutla Creek
- Protects environmentally sensitive habitats for fish, plants, animals, birds

- Provides for orderly development and the extension of infrastructure in an efficient and cost effective manner
- Provides clear direction and options to plan, manage and control the scale, pace and type of community growth
- Removes barriers to community unity, health and wellness
- Addresses current and future community safety risks (e.g. wildfire, flooding, transportation of hazardous goods etc)
- Protects key views and sight-lines
- Makes the community more walkable in all seasons for residents of all ages and physical conditions
- Encourages more four season use of community spaces
- Takes into account full life cycle costs including initial construction, operating and refurbishment costs, and eventual replacement
- Respects heritage and culture
- Promotes community pride and reinforces community identity
- Is adaptable to change over time
- Provides land use certainty
- Generates visible, measurable results consistent with plan vision
- Contributes to a stronger partnership base by bringing more supporters on board.

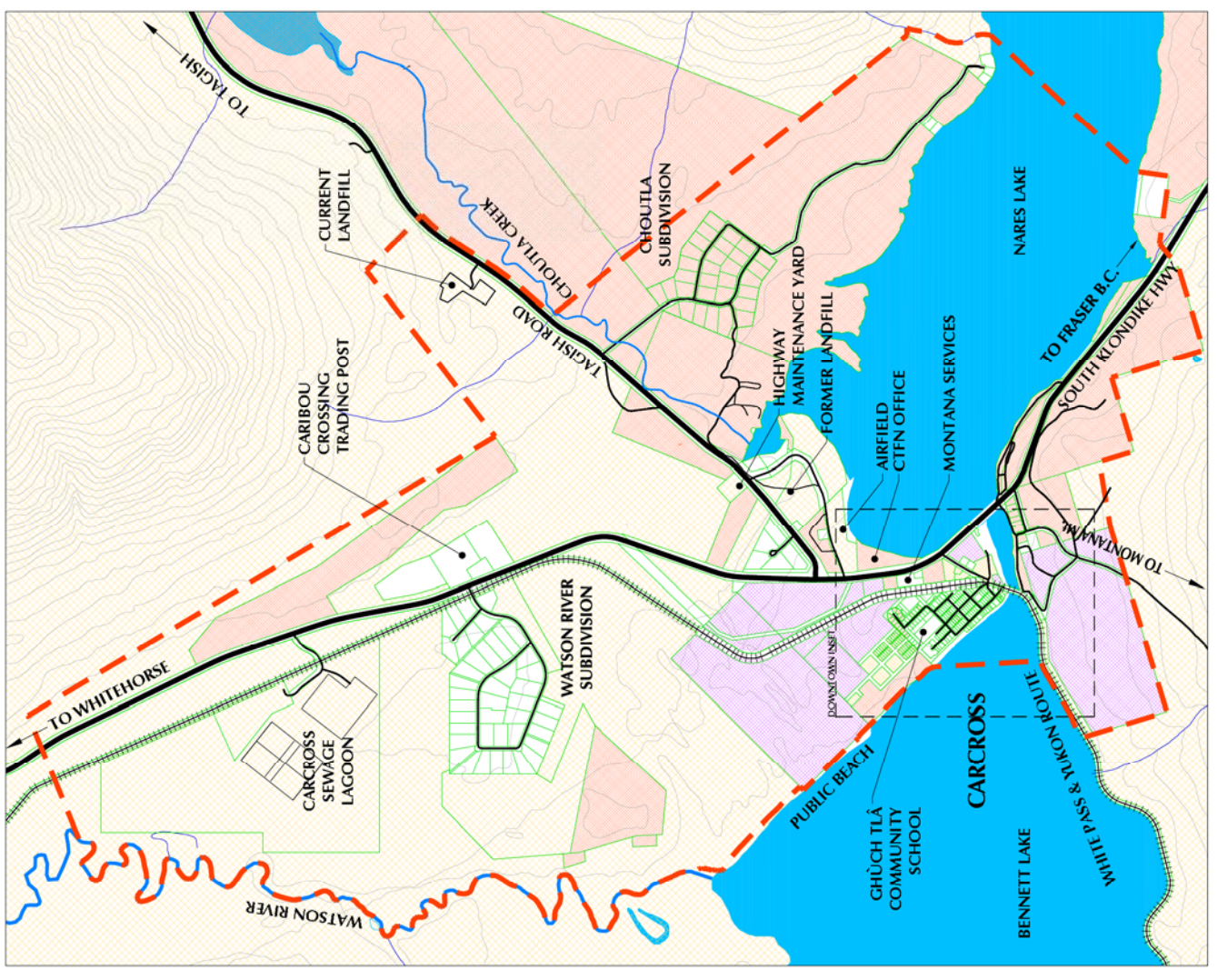
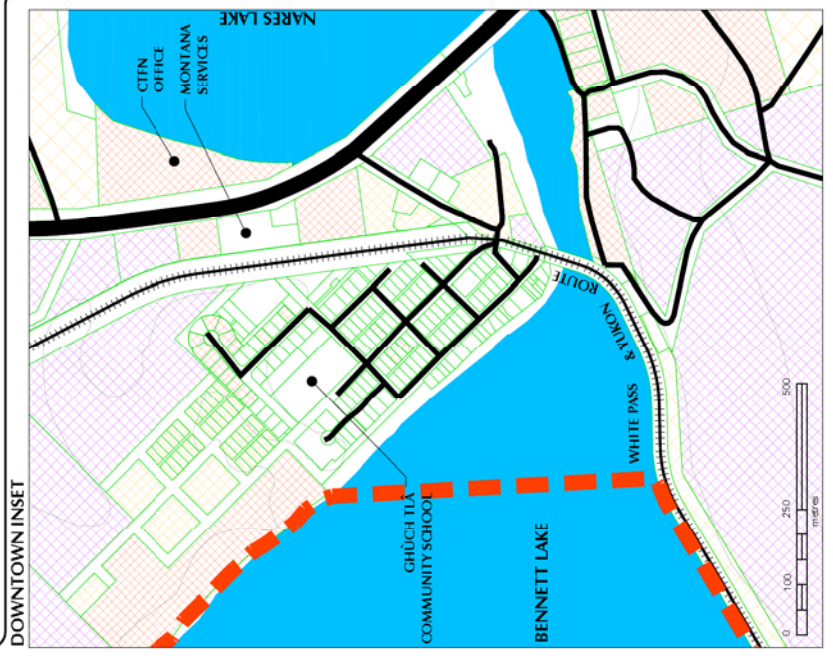
Appendices

- Map of Main Land Ownership
- Map of Existing Land Use
- Map of Key Wildlife Areas in the Region of the Carcross Local Area Plan
- Map of Baikal Sedge and Fisheries Values within the Carcross Local Area Plan
- Map of Carcross Local Area Plan Issues & Opportunities & Concerns
- Map of Carcross Historic Sites

CARCROSS LOCAL AREA PLAN	
MAIN LAND OWNERSHIP	
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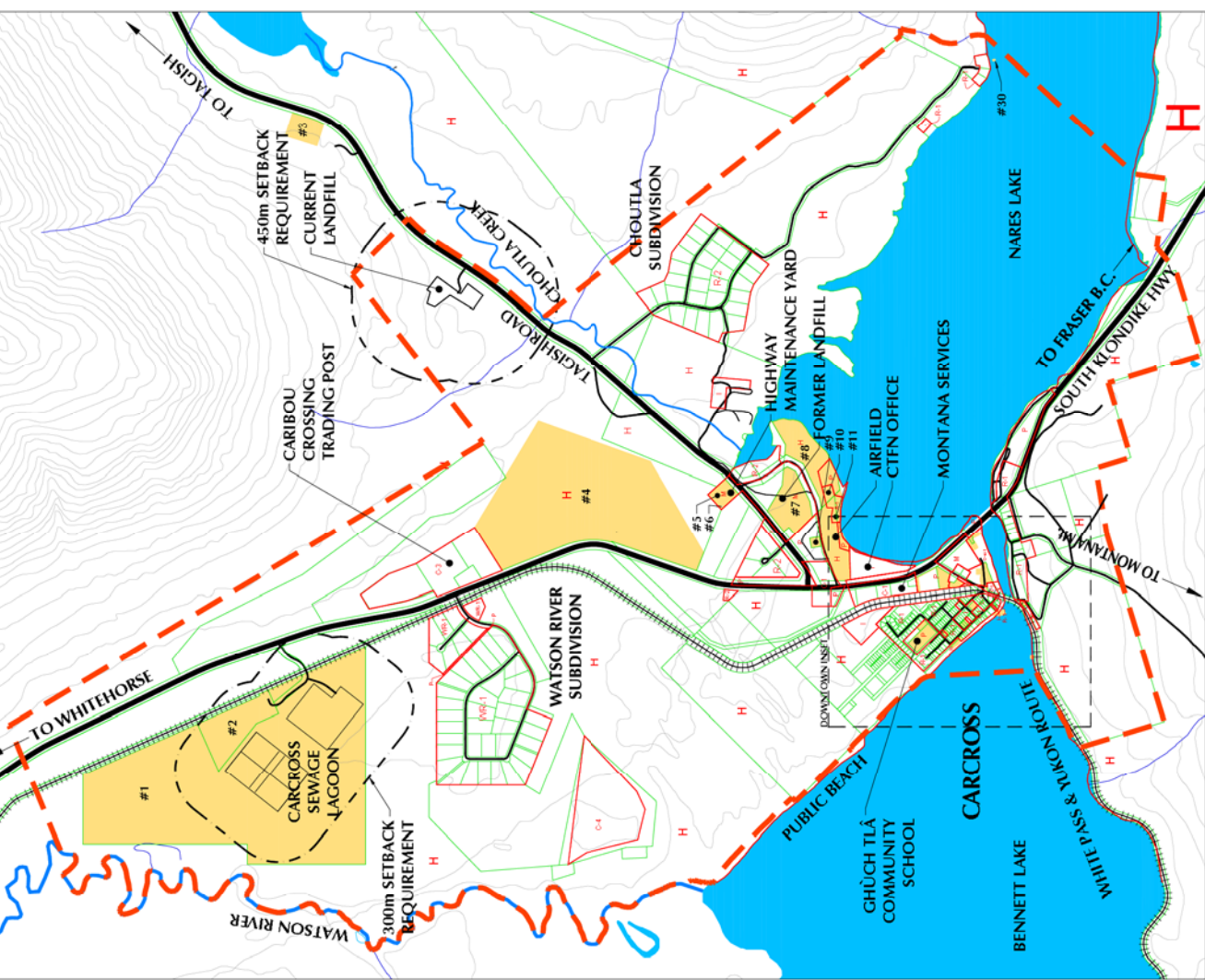
- LEGEND:**
- LOCAL AREA PLANNING BOUNDARY: ≈2094.2ha 100%
 - YUKON LAND: ≈860.2ha 41.1%
 - CARCROSS/TAGISH FIRST NATION LAND: ≈458.9ha 21.9%
 - WHITE PASS & YUKON ROUTE / BRITISH YUKON RAILWAY PROPERTIES: ≈157.5ha 7.5%
 - PRIVATE/MISCELLANEOUS: ≈239.8ha 11.5%
 - WATER SURFACE AREA: ≈377.8ha 18.0%



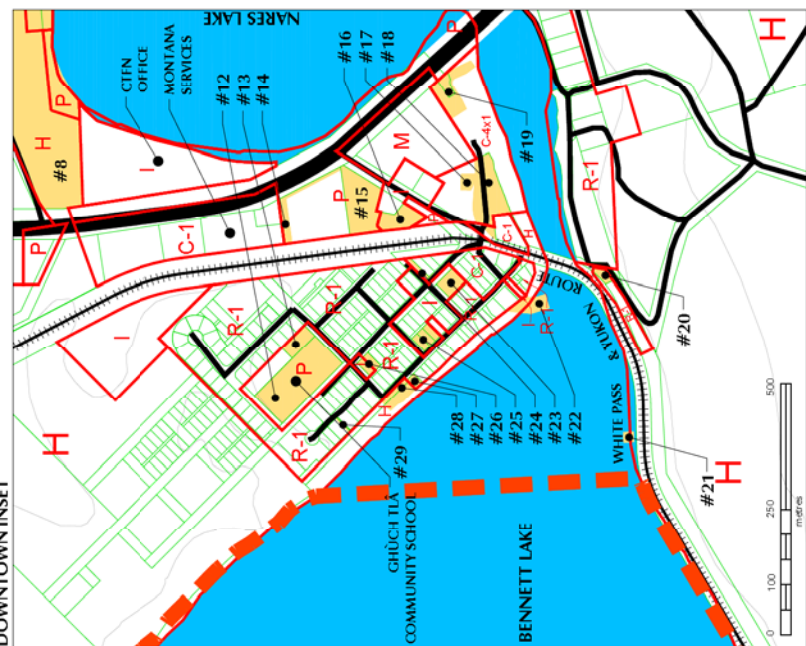
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R-2	COUNTRY RESIDENTIAL	42.5ha	2.03%
WR-1	WATSON RIVER RESIDENTIAL	57.4ha	2.79%
I	INSTITUTIONAL	11.5ha	0.55%
M	INDUSTRIAL	17.3ha	0.83%
P	PARKLAND - GREENBELT	27.9ha	1.35%
CI	COMMERCIAL	94.6ha	4.53%
C3	HIGHWAY COMMERCIAL	17.6ha	0.84%
C4	TOURIST COMMERCIAL	23.8ha	1.13%
H	HINTERLAND	1399.3ha	66.77%
WATER SURFACE AREA		= 377.8ha	18.04%

Number	Type	Purpose	Client Name
#1	Restoration	Carriage Dump	GOVERNMENT
#2	Restoration	Carriage Dump	GOVERNMENT
#3	Restoration	General PM	GOVERNMENT
#4	Restoration	Public Campground	GOVERNMENT
#5	Restoration	Industrial	GOVERNMENT
#6	Restoration	Utility	GOVERNMENT
#7	Restoration	Carriage Dump	GOVERNMENT
#8	Restoration	Public Campground	GOVERNMENT
#9	Restoration	Public Campground	GOVERNMENT
#10	Lease	Residential	PRIVATE
#11	Lease	Residential	PRIVATE
#12	Restoration	Institutional	GOVERNMENT
#13	Restoration	Recreational	GOVERNMENT
#14	Restoration	Recreational	GOVERNMENT
#15	Restoration	Recreational	GOVERNMENT
#16	Lease	Commercial	GOVERNMENT
#17	Lease	Commercial	GOVERNMENT
#18	Restoration	Heritage	GOVERNMENT
#19	Restoration	Heritage	GOVERNMENT
#20	Restoration	Heritage	GOVERNMENT
#21	Restoration	Heritage	GOVERNMENT
#22	Restoration	Utility	GOVERNMENT
#23	Restoration	Industrial	GOVERNMENT
#24	Lease	Residential	PRIVATE
#25	Restoration	Recreational	GOVERNMENT
#26	Restoration	Recreational	GOVERNMENT
#27	Restoration	Heritage	GOVERNMENT
#28	Restoration	Public Use	GOVERNMENT
#29	Agreement for Sale	Recreational	PRIVATE
#30	Lease	Marine	PRIVATE

LEGEND:



DOWNTOWN INSET



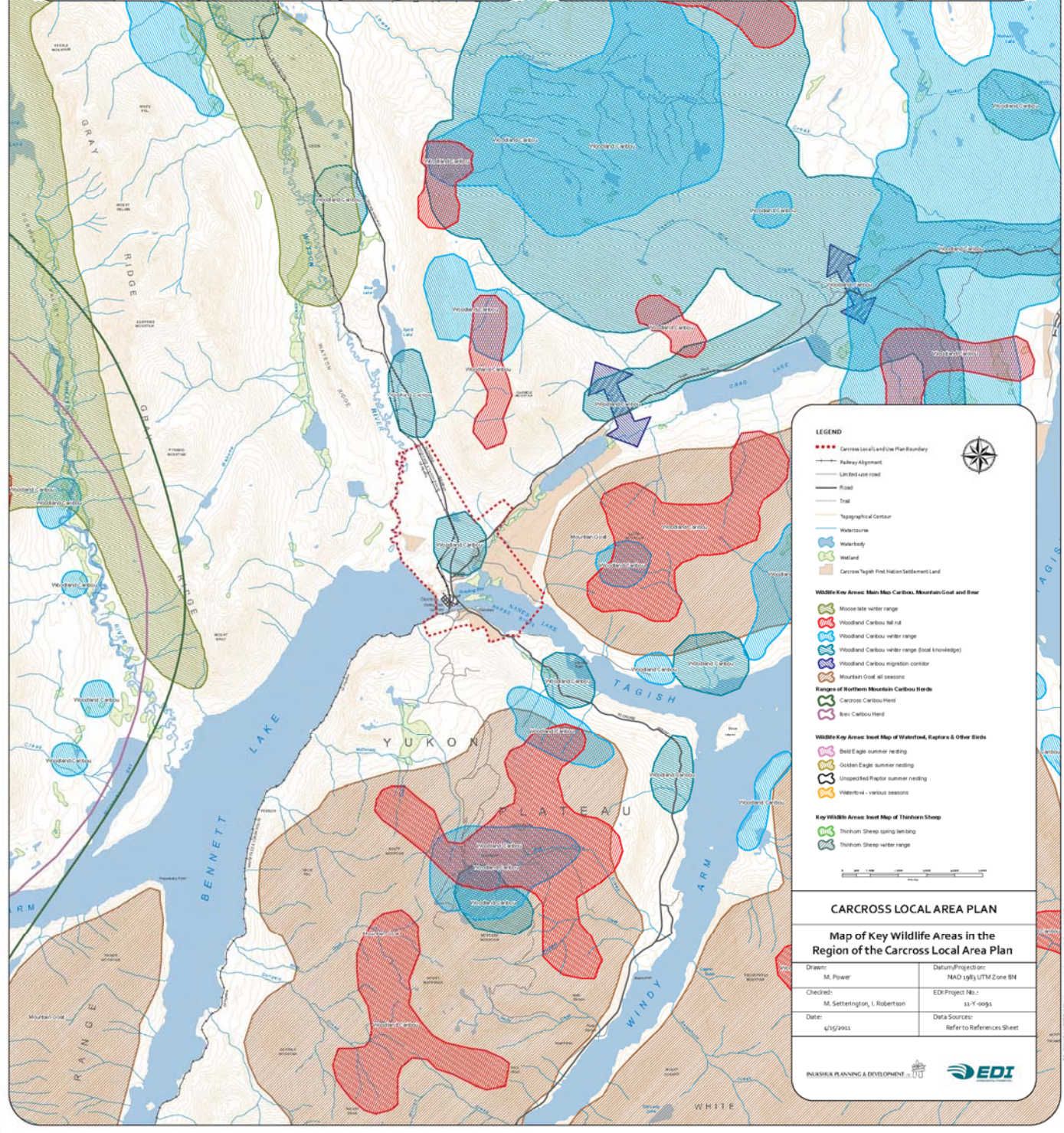
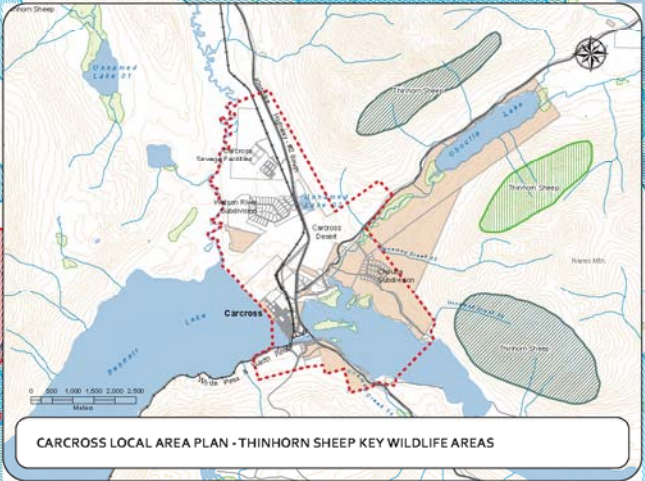
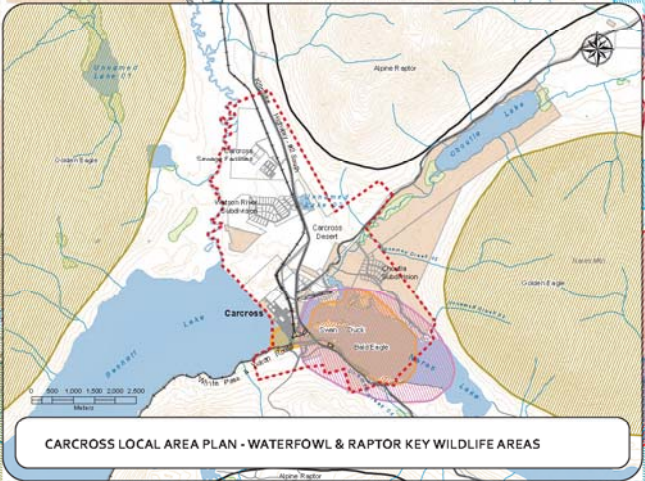
0 250 500 1,000
meters

CARCROSS LOCAL AREA PLAN

EXISTING LAND USE

Scale: 1:5000
Date: 10/20/2014
Project: 14-01-001
Sheet: 14-01-001

EDZ
LANDSCAPE ARCHITECTURE & DEVELOPMENT INC.



LEGEND

- Carcross Local Area Plan Boundary
- Proposed Alignment
- Unimproved road
- Flood
- Trail
- Topographical Contour
- Watercourse
- Waterbody
- Wetland
- Carcross/Tagish First Nations Settlement Land

Wildlife Key Areas: Main Map: Caribou, Mountain Goat and Bear

- Moose late winter range
- Woodland Caribou fall rut
- Woodland Caribou winter range
- Woodland Caribou winter range (best knowledge)
- Woodland Caribou migration corridor
- Mountain Goat all seasons
- Bear Caribou Herd

Ranges of Northern Mountain Caribou Herds

- Carcross Caribou Herd
- Box Caribou Herd

Wildlife Key Areas: Inset Map of Waterfowl, Raptors & Other Birds

- Bald Eagle summer nesting
- Golden Eagle summer nesting
- Unpaired Raptor summer nesting
- Waterfowl - various seasons

Key Wildlife Areas: Inset Map of Thinhorn Sheep

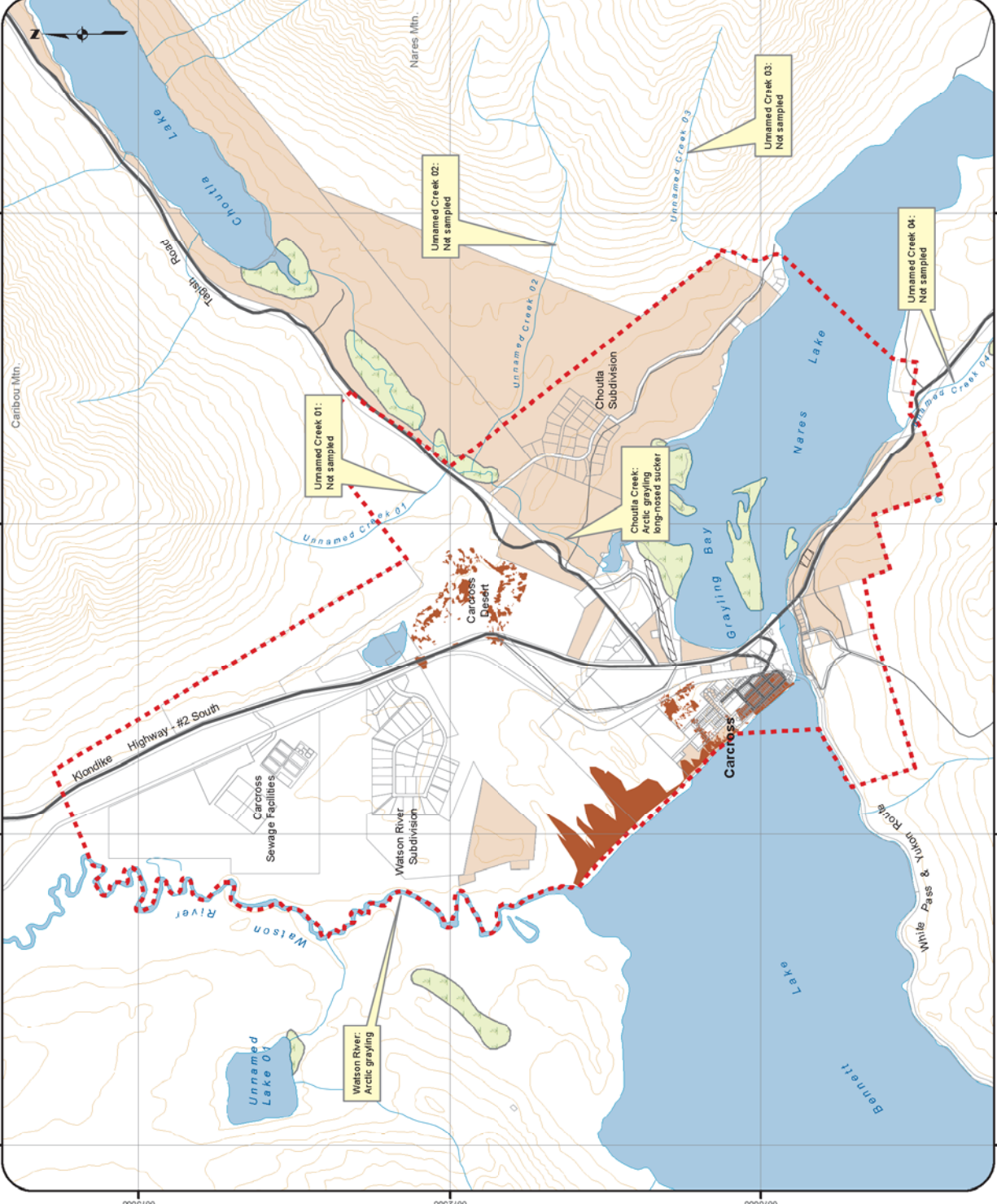
- Thinhorn Sheep spring lambing
- Thinhorn Sheep winter range

CARCROSS LOCAL AREA PLAN

Map of Key Wildlife Areas in the Region of the Carcross Local Area Plan

Drawn: M. Power	Datum/Projection: NAD 1983 UTM Zone 8N
Checked: M. Settegrino, I. Robertson	EDI Project No.: 11-Y-0095
Date: 4/15/2015	Data Source: Refer to References Sheet

INTEGRAL PLANNING & DEVELOPMENT



LEGEND

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

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

The Baikal sedge (Carex sibirica) sedge fields 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 sedge patches as visible on a 0.5m orthophoto.



CARCROSS LOCAL AREA PLAN

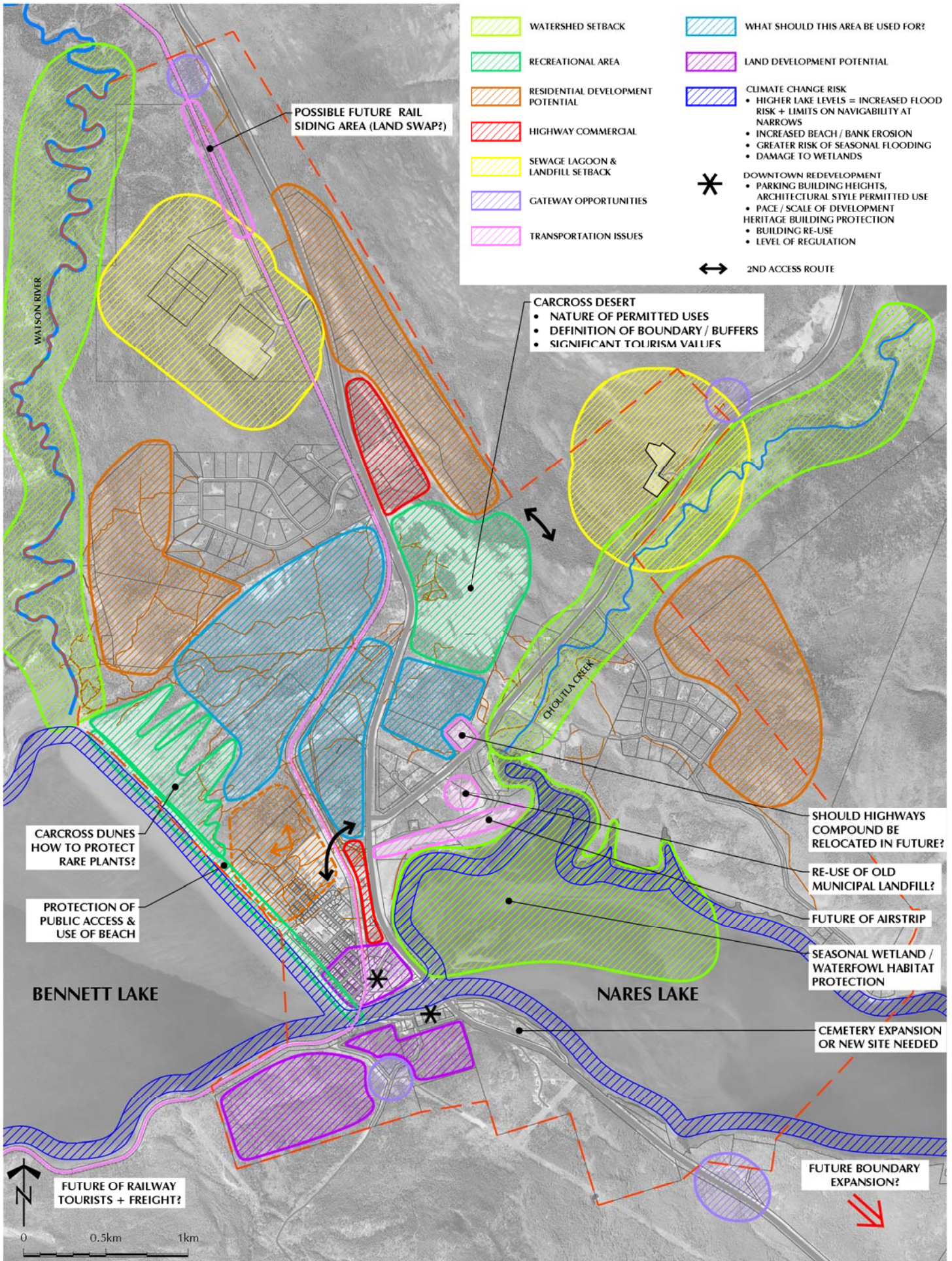
Map of Baikal Sedge and Fisheries Values within the Carcross Local Area Plan

Drawn by:	M. Power	Datum/Projection:	NAD 1983 UTM Zone 8N
Checked:	M. Serrington, I. Robertson	EDI Project No.:	11-Y-0093
Date:	6/8/2011	Data Sources:	Refer to References Sheet



CARCROSS LOCAL AREA PLAN MAP

ISSUES & OPPORTUNITIES & CONCERNS



WATERSHED SETBACK

RECREATIONAL AREA

RESIDENTIAL DEVELOPMENT POTENTIAL

HIGHWAY COMMERCIAL

SEWAGE LAGOON & LANDFILL SETBACK

GATEWAY OPPORTUNITIES

TRANSPORTATION ISSUES

WHAT SHOULD THIS AREA BE USED FOR?

LAND DEVELOPMENT POTENTIAL

CLIMATE CHANGE RISK

- HIGHER LAKE LEVELS = INCREASED FLOOD RISK + LIMITS ON NAVIGABILITY AT NARROWS
- INCREASED BEACH / BANK EROSION
- GREATER RISK OF SEASONAL FLOODING
- DAMAGE TO WETLANDS

DOWNTOWN REDEVELOPMENT

- PARKING BUILDING HEIGHTS, ARCHITECTURAL STYLE PERMITTED USE
- PACE / SCALE OF DEVELOPMENT
- HERITAGE BUILDING PROTECTION
- BUILDING RE-USE
- LEVEL OF REGULATION

2ND ACCESS ROUTE

POSSIBLE FUTURE RAIL SIDING AREA (LAND SWAP?)

CARCROSS DESERT

- NATURE OF PERMITTED USES
- DEFINITION OF BOUNDARY / BUFFERS
- SIGNIFICANT TOURISM VALUES

CARCROSS DUNES
HOW TO PROTECT RARE PLANTS?

PROTECTION OF PUBLIC ACCESS & USE OF BEACH

BENNETT LAKE

NARES LAKE

SHOULD HIGHWAYS COMPOUND BE RELOCATED IN FUTURE?

RE-USE OF OLD MUNICIPAL LANDFILL?

FUTURE OF AIRSTRIP

SEASONAL WETLAND / WATERFOWL HABITAT PROTECTION

CEMETERY EXPANSION OR NEW SITE NEEDED

FUTURE BOUNDARY EXPANSION?

FUTURE OF RAILWAY
TOURISTS + FREIGHT?



