

THE STORY OF TAAGISH TÓO'E' / TAAGISH HÉENI



Tagish River Habitat Protection Area Draft Recommended Management Plan

Prepared by the Tagish River Habitat Protection Area
Steering Committee

The Tagish River Habitat Protection Area Steering Committee dedicates this Management Plan to the late Albert James - Shakoon and would like to thank the Dakléwédí Clan for their contribution to this planning process. Albert was passionate about his people's rights and committed to the protection of the land, water and animals. He provided significant contributions to the land claims process, using his knowledge of the land, the communities and their cultural practices. He represented his people on countless boards, committees and planning processes, including the Tagish River Habitat Protection Area Steering Committee. Albert was an assertive person with a huge and generous heart.

He loved to be on the land.

He truly was part of the land and part of the water.



Front and back cover art by Violet Gatensby.
All photos by Paul Dabbs except where otherwise noted.

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Elders' statement

- Tagish
- Tlingit
- English

Ta ɔ̄gish kut'ínè' yi t'è, ɔ̄ngít chųh yi t'è,
Tàgish Khwân hà setiyí kha ɔ̄ngít hà setiyí,
We who are Tagish and we who are Tlingit,

dàdidi nenh kay' yàni z̄h̄ āakùt'è.
hà shegûn áwé ch'âgudáxh xhàt yáxh yenaxh kawsia.
our heritage has grown roots into the earth since the
olden times.

Dàdidi nenh kay' yèh tū chųh ilani t'è.
Éch-áwé yá t'étgi in hà siti, kha yá hîn.
Therefore, we are part of the earth and the water

Wet'âkudiht'è dàdidi naxuts'inilā kùt'è
Yutusikû hà wiyexhi À hà jináxh ekawsihâ
We know our creator entrusted us with the responsibility

nenh yèh tū chųh mek'ânùtà' doga, ch'ètlok kuts'j̄h,
yá t'étgi ká tuletíni ch'e tlèxh, kha yá hîn,
of looking after the land into perpetuity, and the water,

yè nenh kay' selā, yè nen t'ey selā chųh kud̄y' kuts'enh.
kha hà t'étgi ke.édi ldekét, kha hà t'étgi tey.ádi.
and whatever is on our land, and what is beneath our
land.

Mā dahk'èh edèl eyedi ch'ètlok ch'enh yè nen t'ey selā
chųh kud̄y' kuts'enh.
Éch hà itnáxh yà ne.et à hes du jidé keg
So those coming after us, we will give them that
responsibility into perpetuity.

K'òhtseh dahchō k'èh dàdidi nen k'ânùhtà' sh̄j̄h, n̄ ūne
chųh, dene chųh.
Hà tlagù khwâni e kék' yen hes hà yawsikhâ et yâ
eyegaxhtùnê.
Our elders have assigned us the task of showing respect
to things.

Dàxuts' ehndī k'èh dahnenè' k'ânùhtà' sh̄j̄h, ÷
Éch-áwé hes du xh'akâx' yá hà t'étgi ká gaxhtuletín,
Therefore, we will look after our land as they have told us
to do,

dahchō k'èh chųh,
hà tlagù khwâni hes du yáxh,
as did our elders,

dàdidi nen kay' k'òhtseh fideł akùt'è,
shux'wânáxh yá t'étgi kèt yutù.ádi,
because we were the first to come to this land,

dàdidi kēzheh Canada kùzhē.
yidét yá Canada yū duwasâgu yé
that is now called Canada.

Dàdidi nen ts'āde yàts'ulè' sh̄j̄h. ÷
Hà t'étgi s'atí daxh hà guxhsetí.
We will be the bosses of our land.

Dahnenè sògòsên mek'ânùhtà' sh̄j̄h
Hà t'étgi gaxhtuletín
We will watch over our land

medânîlè' k'èh chųh,
àdé khùn yen yawtusikhâ yé yáxh,
as we have agreed upon,

dakhuni dahk'èh k'ânùht'j̄h sh̄j̄h. ÷
kha uhân àdé ét et kawtuwa.àghú yáxh hà shegûn kâx'.
and as we ourselves manage things according to our
traditions.

Dene dahk'èh edèl chųh kâkuht'j̄h sh̄j̄h ch'ètlok ch'enh.
Hà itnáxh yà ne.et à hes du jidé yegaxhtusekhâ ch'e
tlèxh.
We will bequeath it to those coming after us into
perpetuity.

Dene yèh edesedùdlà' sh̄j̄h dahk'èh kukden doga,
Khùn yè jigaxhtùnê hà shegûn gaxhtuletsiní,
We will work with people to strengthen our heritage,

dene dâli nótset doga,
hà lingídi khustiyí yen wutulejâghú,
to give a firm foundation to our people's lives,

dahnenè' sògòsên mek'ânùhtà' doga.
kha k'edên ét kawtù.àghú uhân hà t'étgi.
and to manage our land well.

Dene k'adehtla' t'eh yèh edesedùdla' sh̄j̄h dahnenè'
k'ânùhtà' doga,
ldekét khwân in yè jigaxhtùnê hà t'étgi k'edên tuletíni,
We will work with all peoples to take good care of our
land,

yè yàk̄l̄ l̄j̄ chųh dàdidi nenh kay',
kha yá t'étgi ke.édi ldekét,
and all the resources of this land,

daxuni dahts'āt yàdi l̄l̄.
àdé khùn yen yawtusikhâ yé chush s'atí hà guxhsetí.
as we have agreed on, we will be our own masters.

Ta ḡgish kut'īnè yi t̃ē, Ƙingít chụh yi t̃ē,
Tàgish Khwân hà setiyí kha Ƙingít hà setiyí,
We who are Tagish, and we who are Tlingit,

dahnenè' mek'ânûhtà' shǐh,
hà t'ítgi káxh yénde ekaxhtùdét,
we will protect our land,

kuch'u t̃'eh kǔlè shǐh,
e yáxh et neghati àdé yen yawtusikhà yé khùn,
so that things will be according to what has been agreed
on,

kuk'èh t'eh yàkūndih dogá.
e kâx' daxh hes khughàghasti yís.
so that they will live by it.

Etl'ah yàdīnī k'èh,
Yá àdé khùn yen yawtusikhà yé kâx',
According to what we have agreed on,

sògòsèn eyedi dahts'āde yèh edesedūdlà' nih.
yaxh yekaxhtusexixén wé government in yé jiné.
we will reform the way we work with the government.

ƙeyèh sògòsèn edesedūdlà' shǐh,
Hùsh yá ewudenétin hùsh in yé jigaxhtudenê,
We will work together with mutual respect,

ƙeyèh t̃lā' yàts'ūt'èh.
x'èghà ét yáxh khugaxhtùnùk.
and act truthfully [toward each other].

ƙeyeh edesedūdlà' shǐh,
Ƙdekét hùsh in yé hes jiguxhdenê,
We will all work together

mānen et'ī chụh, mānenh kay' k'âkedèl chụh.
yá hà t'ítgi ká khu.ūwu, kha hà t'ítgi ét elyèxh à
those who own the land and those who use the land.

ƙeyèh mek'ânûtà' shǐh
Tle ƙdekét uhân ét kegaxhtù.âkhw
We will manage together

nen chụh tū chụh yē nenh kay'selā chụh mek'ânûtà' shjh.
yá tíetk kha yá hîn kha yá t'ítgi ke.édi.
the land and the water and what is on the land.

Dene dahk'èh edèl dogá sògà nàkùts'et.
Àghâ tsá ƙdekét ét hes du jiyís yénde ghwaní hà itnáxh yà
ne.et à.
Then everything will be prepared for those coming after
us.

Ƙū' yàdīnī k'èh, kădīt'ī.
Yá àdé khùn yen yawtusikhà yé yáxh gaxhtùsgít.
As we have agreed on, so we will act.

Dahchō yàkūnī k'èh, edesedūdlà' k'èh,
Hà tlagù khwâni hes du xh'ayáxh yé jigaxhtùnê,
We will work as our elders instruct us,

dene dahk'èh edèl ghah, sògòsèn kùlǐ dogá.
kha hà itnáxh yà ne.et à hes du jiyís kè et kaxhtulek'ê.
and improve the lot of those coming after us.

Ƙè' dene kuyèh chụh, dahnenè' k'âkudèl dogá.
Yá hà àní ch'e ghune.à nà in ét gaxhtuleyèxh.
We will use our land with other nations.

Dahnenè', sògòsèn mek'ânûhtà' shǐh
E tux' hà, àní k'edèn gaxhtuletín
Moreover, we will look after our land well

dahdunin dogá, sògà kù'ānǐh.
hà itnáxh khâwu hes eghàxhsetini yís àdé yek'èyi yé.
so that our descendents can see how good it is.

Ekùts'jh na ts'ī'as dàdidi mekay' kuts'en ya k̃i dl'ī.
Hà itnáxh khâwu hes eghàxhsetini yís àdé yek'èyi yé.
And in this way too we will respect our land from which
we were born.



“I’ve known these stories for 60 years back. I remind myself all the time, so I won’t forget. Now we have modern tools, like this paper, but the old stories gave us an action for everyday life.”

Norman James,
Carcross/Tagish First Nation, 2004

A guide to this plan

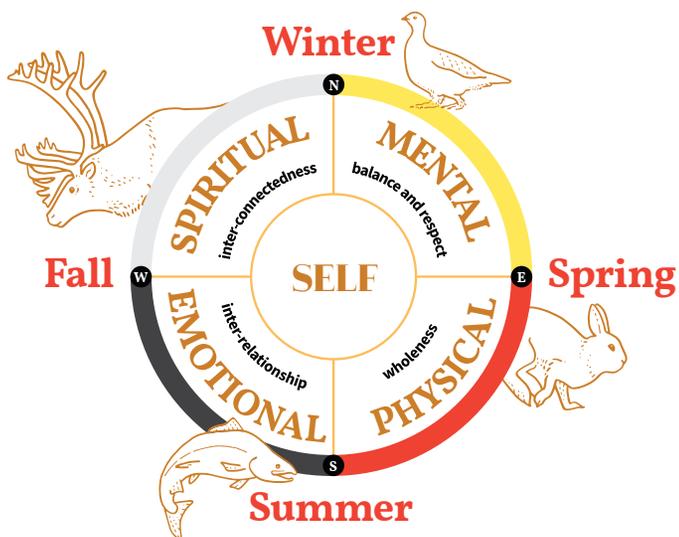
Throughout this management plan you will find information on Taagish Toó’e’, Taagish Heeni or the Tagish River and the significance of this area to the Carcross/Tagish First Nation, local community members, as well as its ecological importance in Yukon.

Story, language and ceremony are valuable mechanisms traditionally used to educate people about how to have respectful relationships with the land, water, and its inhabitants. These facets continue to govern the Carcross/Tagish First Nation today.

Stories passed down from generation to generation speak to the importance of the Tagish River and surrounding area as the birth place of Carcross/Tagish First Nation clans. Language and place names have also been passed down and are still used today, underlining the deep connection between the land, water, wildlife and people. Ceremony is an expression of the traditional values of respect and reciprocity. It is an acknowledgement of what the land and water are offering. Ceremony is profoundly personal and does not need to be a large event or gathering. The stories told and ceremonies practiced are social activities designed to serve a specific purpose and audience. Emphasis and details may change to keep the story relevant, but the underlying theme and values do not change. These oral traditions give meaning to the responsibility people, families and clans have for each other, the larger community and the land and water.

The medicine wheel/ seasonal round

The medicine wheel or seasonal round is a well-known symbol used by Indigenous cultures across Canada and around the world. This graphic helps to illustrate an Indigenous perspective or world view. The medicine wheel shows the processes of life for how all things evolve over time and are interconnected.



The Tagish River Habitat Protection Area (HPA) Steering Committee has used the medicine wheel concept to tell the story of the Tagish River through the four seasons. This management plan is therefore divided into sections that describe what occurs in the HPA in each of the four seasons through traditional, local, and scientific ways of knowing.

Each quadrant of the medicine wheel is related to a season and a direction, but also to the mental, physical, spiritual and emotional components that must be considered in order to have a holistic and

connected management framework. This format helps us understand the different values and connections that exist in the area. The medicine wheel provides a spiritual connection and an understanding of traditional knowledge acquired over time through use and experience. The plan provides ecological and scientific information to explain the physical, and how it relates to the land, while addressing the emotional by exploring management options that will allow for future generations to enjoy and respect the area.

The Steering Committee's management recommendations emerge from the stories, and are referenced to throughout the descriptions of the seasons. The management recommendations are listed in a separate section at the end of this document.

Practicing ceremony

One simple way to practice ceremony is to give thanks for what the Tagish River provides to you personally. One might give the Tagish River a small gift, such as sage or tobacco or a small bit of food, to honour the land, water, animals or those that came before.

Ceremony and storytelling

The Celebration of Swans is held annually at the Tagish River. Throughout April and early May, residents and visitors alike gather to welcome spring to the North and to witness the return of the swans. Many people gather at the Tagish Bridge Recreation Site to hear traditional stories from Elders about life in Tagish, the history and culture of the area and other stories passed down from generation to generation.

Our evolving relationship with the land and the water

Woosht há s kawsixát, Aan, Héen ká ya Aan ká.adi

(the interconnectedness of land and water in the Tlingit language)

The Tagish River is located near the downstream end of the Southern Lakes system, between Tagish Lake and Marsh Lake, the final waterbody forming the headwaters of the Yukon River (Figure 1). The Yukon River then drains north and west for 3000 kilometres through Yukon and Alaska to the Bering Sea. This small, yet significant, part of the Yukon River has been known by numerous names such as Taagish Too'e, Taagish Heeni, Six Mile River and Tagish Narrows. The Tagish River HPA covers a total area of five square kilometres and is surrounded by the small, rural community of Tagish (Figure 2).

The Tagish River is an ecologically diverse system providing habitat to a number of species. When considering the water of the river, one must view the entire watershed including ground water, aquifers and all upstream bodies of water. The Tagish River is not a closed system; external factors can and do impact the river.

The Carcross/Tagish First Nation people have always recognized the Yukon River headwaters as the giver of life within their Traditional Territory. They acknowledge and respect the interconnected relationship with water as they consider it *Idakát át ayakghwahéiyagu khudzitee* or "the spirit of all things." The Tagish River was once the headquarters of the Tagish people and continues to be an important part of the homeland of the Carcross/Tagish First Nation today. Tagish is considered a sacred place, important culturally and spiritually. The Carcross/Tagish First Nation sees the Tagish River as a mother, or life source, stemming from its role in their history, culture and survival.

They have welcomed many people to the area over the years for trade and celebration, and even assisted early explorers and prospectors. Today the Carcross/Tagish First Nation continues to celebrate here through family and community gatherings and ceremonies.

"The depth of indigenous knowledge rooted in the long inhabitation of a particular place offers lessons that can benefit everyone, from educator to scientist, as we search for a more satisfying and sustainable way to live on this planet."

Kawagley and Barnhardt 1997:9

The importance of this area was voiced by Elders during land claim negotiations. Ultimately, protection of the Tagish River was identified in Chapter 10 of the Carcross/Tagish First Nation Final Agreement. This joint management plan and ongoing efforts toward reconciliation, demonstrate a desire to protect and rebuild connections to the Tagish River as expressed in the Elders' Statement. In the Tlingit language there is a very powerful phrase: *Yakg wahéiyagu*. This sacred phrase describes the spirit and agency of all things. This is what this Tagish River HPA management plan is all about.



The people of the Carcross/Tagish First Nation are descendants of the Tagish Dene (Tagish people) of Yukon and the Tlingit people of coastal Alaska. For thousands of years, the Tagish Dene's way of life was dependent on the interconnected relationship between people, land, water and animals. The coastal and inland Tagish and Tlingit peoples have co-evolved with the significant bodies of water around them (the Southern Yukon Lakes, Yukon River and Pacific Ocean) for over 9,000 years. This water-centric mutual relationship is reflected by Tagish and Tlingit clan names and place names, over 70% of which are directly water-related, and many significant traditional stories that still have high importance today, including "Salmon Boy," "The Boys who Drifted Down the Yukon River" and "Wealth Woman (**Figure 3**)."

Coastal Tlingit neighbours engaged with the interior Tagish people in extensive trade over the mountains using well-established routes such as the Chilkoot and Chilkat trails. Over time, the Tagish

and Coastal Tlingit people began to intermarry, merging the cultures. The Tagish people adopted the clan system of their coastal relatives, which the Carcross/Tagish people (and government) still use today. The Carcross/Tagish clan system includes two moieties: the Gooch (wolf) and the Yéil (crow). Within these two moieties are six clans: the Dakl'aweidí and Yanyedí who form the wolf moiety and the Deisheetaan, Ganaxtedí, Ishkhíttaan and Kookhíttaan who form the crow moiety. This social system, and its associated customs and practices, ensures balance, respect, and reciprocity among the people.

Haa Shagoon by Angela Sidney, 1983

Many generations ago, a coastal Tlingit chief from Admiralty Island travelled north up the Lynn Canal to spend a summer fishing with his kinsmen on the Chilkat River. The Chilkat flows into this canal near present day Haines Alaska, and has always been an abundant salmon river. The chief's wife and daughter accompanied him and the three stayed there working, visiting and drying fish for two months of the summer at the old village of Klukwan.

When it came time to return, a son of the host Chilkat Chief informed his father that he wanted to marry their visitors' daughter. The families discussed the proposed union (which they surely must have considered already). They gave their permission, the marriage of the young couple took place and the new husband accompanied his wife's family back to Angoon.

The young wife was a member of the Deisheetaan clan or 'nation'; that is, she belonged to the same hereditary (Crow) kin group as her own mother and her mother's mother. She, herself, gave birth to three daughters, some say four. When those girls reached marriageable age, they took husbands from inland, up the Taku River and beyond the mountains, Athapaskan men who would have been involved in the fur trade from the interior to the coast and who would have welcomed the alliance with the coastal Tlingit.

These daughters are credited with being the founding sisters of the Deisheetaan clans in the areas now called the Yukon and northern British Columbia. One married a Tagish man from near Tagish Lake and her descendants became the Carcross and Tagish Deisheetaan. A second married a man from Teslin Lake and the present Tlingit Deisheetaan trace ancestry to her. A third married a Tahltan man on the upper Stikine River near present day Telegraph Creek: Their descendants took the clan name Kaach.adi rather than Deisheetaan. A fourth may have married a man from the upper Pelly River, but this is less clear.

The history of the Tagish River is told through the stories of these clans where their main camps once stood. At the old village of Tagish, which is now the site of the Tagish Campground, there were two long houses that the Daklaweidi and Deisheetaan clans built in the Coastal Tlingit style. The remains of many important sites are scattered throughout the Tagish River HPA, including hunting and fishing sites, gravesites and other spiritual sites.

The Carcross/Tagish people lived a busy, nomadic life, travelling great distances. They would often gather on the Tagish River for potlatches, ceremonies, celebrations and other social events. The Tagish River was used extensively and shared respectfully by many families. There are more than 30 recorded heritage sites within the Tagish River HPA, many of which represent habitation long before the deposition of the White River Ash (1,200 years ago).



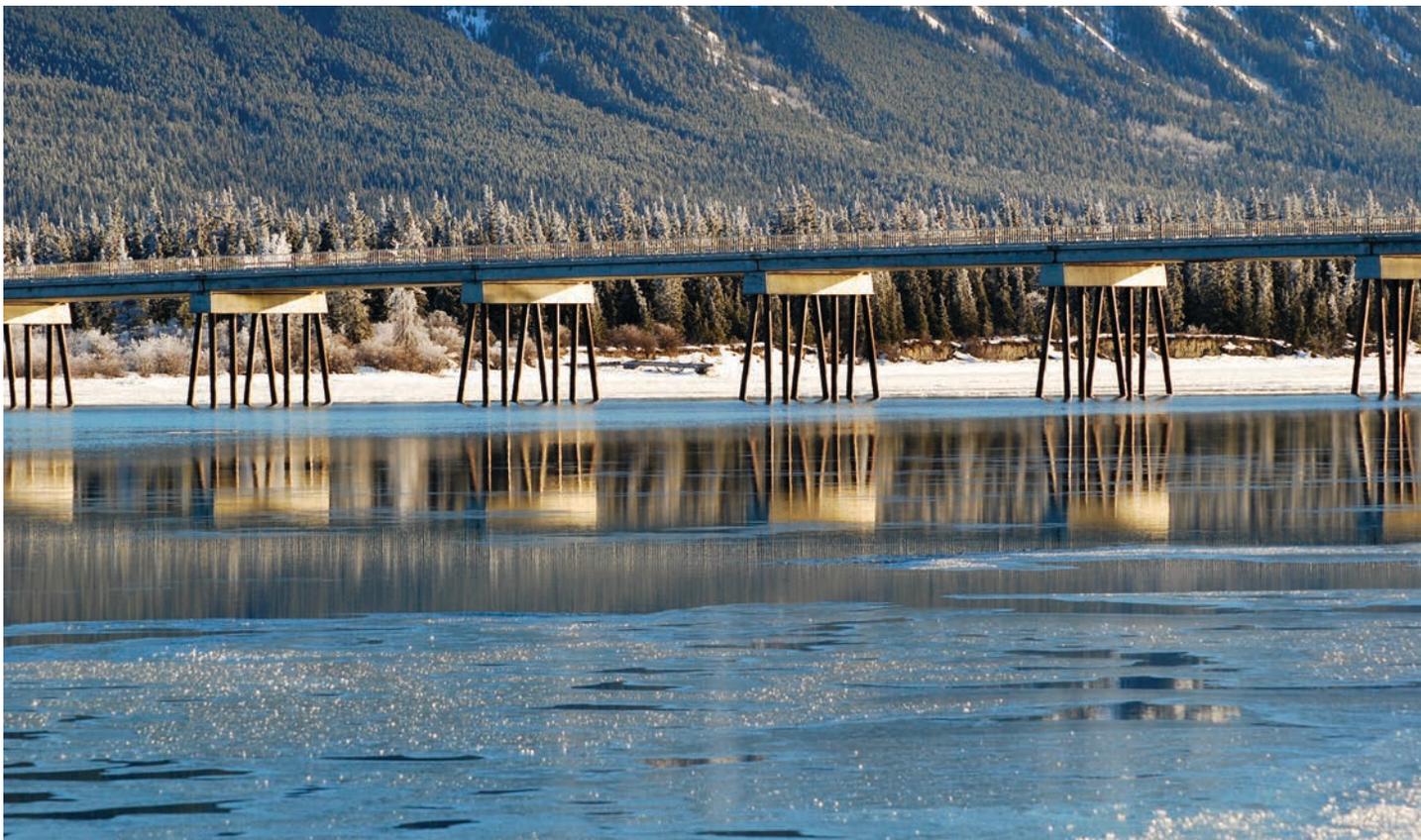


One heritage site in particular reflects the importance of the Tagish River as a place where people gathered as well as their trade connections. In 2016, a large underground cache of six large obsidian artifacts was found. Obsidian, a natural volcanic glass commonly used to create extremely sharp and effective stone tools, was once a highly valued resource. The cache was traced to Mount Edziza, located near Telegraph Creek. The size of these pieces indicate that they were likely quarried during older occupations. This find shows that the people of Tagish were accessing trade networks that reached at least to Telegraph Creek. Furthermore, it shows that the Tagish area had valuable resources, worthy of trade for such items. The caching of such a valuable resource could be an indicator that Tagish River was a place where people returned to often.

The Carcross/Tagish First Nation people hunted and fished along the Tagish River year-round. Activities varied through the seasons: Caribou and moose and other large game were hunted

in the fall, furbearers were trapped in the winter, waterfowl and game birds, including ducks, geese, Trumpeter Swans and grouse, were hunted and gull eggs collected from the island on the Tagish River in the spring, and gathering and trade were done in the summer.

The Klondike Gold Rush began in 1896 following the discovery of gold near what was to become Dawson City. At that time, travel routes into the interior of southern Yukon were controlled by the coastal Tlingit. As the flood of people increased, the Tlingit gradually lost this monopoly on packing and guiding gold seekers over the passes. The route from Bennett Lake along the upper Yukon River via the Tagish River to Dawson City became the main artery into the interior of Yukon. Tens of thousands of people flooded the Traditional Territory of the Carcross/Tagish First Nation. A North-West Mounted Police post was established on the Tagish River in 1897 to monitor the thousands of pioneers moving through the area.



The landscape changed forever, and because of their connection to the land and water, the lives and traditional ways of the Carcross/Tagish people were also forever altered. The gold-seekers cut most of the trees within reach of the water to build rafts and float boats to Dawson City and later to provide fuel for the steam-powered sternwheelers that travelled the river system. Many caribou, moose and fish were harvested to feed the gold-seekers along the way. This was the beginning of the decline of the once numerous Southern Lakes caribou herds.

In 1899, the Lewes Dam, which is downstream of the Tagish River HPA, was built to control the flow of water in order to help break up ice in Lake Laberge and allow for a longer navigation season. Today, the Lewes Dam regulates the flow of water out of Marsh Lake, and consequently the water levels of the Tagish River, in order to increase the water available for winter power generation at the Whitehorse Rapids Generating Station, built in 1958.

In 1942, the Alaska Highway was built by the American military during World War II. Roads to Carcross and Tagish, as well as the Tagish Bridge, were also constructed during this time. Once again the region was inundated with visitors who cut large portions of the forest and hunted, which further contributed to the decline of caribou populations.

After experiencing constraints on their traditional lifestyle and attempting to have their rights recognized by the federal government, Yukon First Nation leaders presented *Together Today for our Children Tomorrow* to the Prime Minister of Canada in 1973. This historic document helped map the way to Yukon First Nation land claims and self-government. Thirty-two years later, in 2005, this negotiation process resulted in the signing of the Carcross/Tagish First Nation Final Agreement, recognizing the First Nation's authority to govern their own people and lands.

The population of Yukon, particularly Whitehorse, has increased over the years and so has the interest in recreational properties along Tagish Lake and the Tagish River. The first recreational lots in Tagish were developed along the river in the 1960s as lease properties due to the fact that a huge development project, the Frobisher Project, was being considered. Its purpose was to create the largest power generation yield in the world, based on a massive dam on Lake Laberge and three big hydro-plants in the vicinity of Kluane, the Chilkoot Pass and Teslin. Had it gone forward, the communities of Whitehorse, Carcross and Champagne would have been relocated to avoid flooding by the artificial lake. This plan which formally remained on the books for about 20 years, clearly demonstrates very different world views of water and its purpose.

“When dominant cultures are undergirded by anthropocentric logics of efficiency, profit, and progress, waters are all too often made nearly invisible, relegated to a passive role as “resource,” and subjected to containment, commodification, and instrumentalization.”

Chen et al., 2013: 3



The project was eventually abandoned, and Tagish slowly took on the character that is found today. With residents who come from all walks of life and all ages, Tagish's diverse population includes First Nation citizens, families with young children, retirees, people who commute to Whitehorse for work and weekenders. Local residents value the natural beauty of Tagish and its easy access to nature. It is this appreciation that will forge a strong relationship to the land and it is with this aim that this management plan will attempt to ensure that these relationships continue into the future.

The Tagish River HPA management plan offers perspectives on a Tagish and Tlingit sense of place. One meaning of the word Tlingit is "people of the tides." Immediately, this identification with tides introduces a profound experience of water as well as a keen sense of place.

The literal meaning of the Tagish word for water is a person, an animate being. Over millennia, humans have developed nuanced, sophisticated and intimate water knowledges. However, there is little in the anthropological or geographical record that showcases contemporary Indigenous societies upholding customary laws concerning their relationship with water, and more precisely,

how this dictates their philosophy of place. It is in the Indigenous record, and in this case the Tagish and Tlingit traditional knowledge, place names and cultural practices, that principles of a deep connection to water are found. These are foundational principles for the Tagish River HPA, which seeks an alternative management approach to promote and sustain Tagish and Tlingit values.

In 2015, a Steering Committee was established to create this management plan for the Tagish River HPA as a joint effort between the Carcross/Tagish First Nation, Government of Yukon and Government of Canada. The planning process has revealed the importance of reconnecting Yukoners to the Tagish River. The management plan aims to protect the ecological integrity of the Tagish River while providing an opportunity for all people to connect with and appreciate its unique beauty. This management approach will safeguard this important and sacred area for generations to come. The Tagish River Habitat Protection Area is a model to showcase this at an intimate and locally appropriate scale. It is Naskwéit Ch'aaku Kwaani at wooskoowu Lingit Aanitlein dat at, Tlingit for "traditional knowledge sharing about our environment."

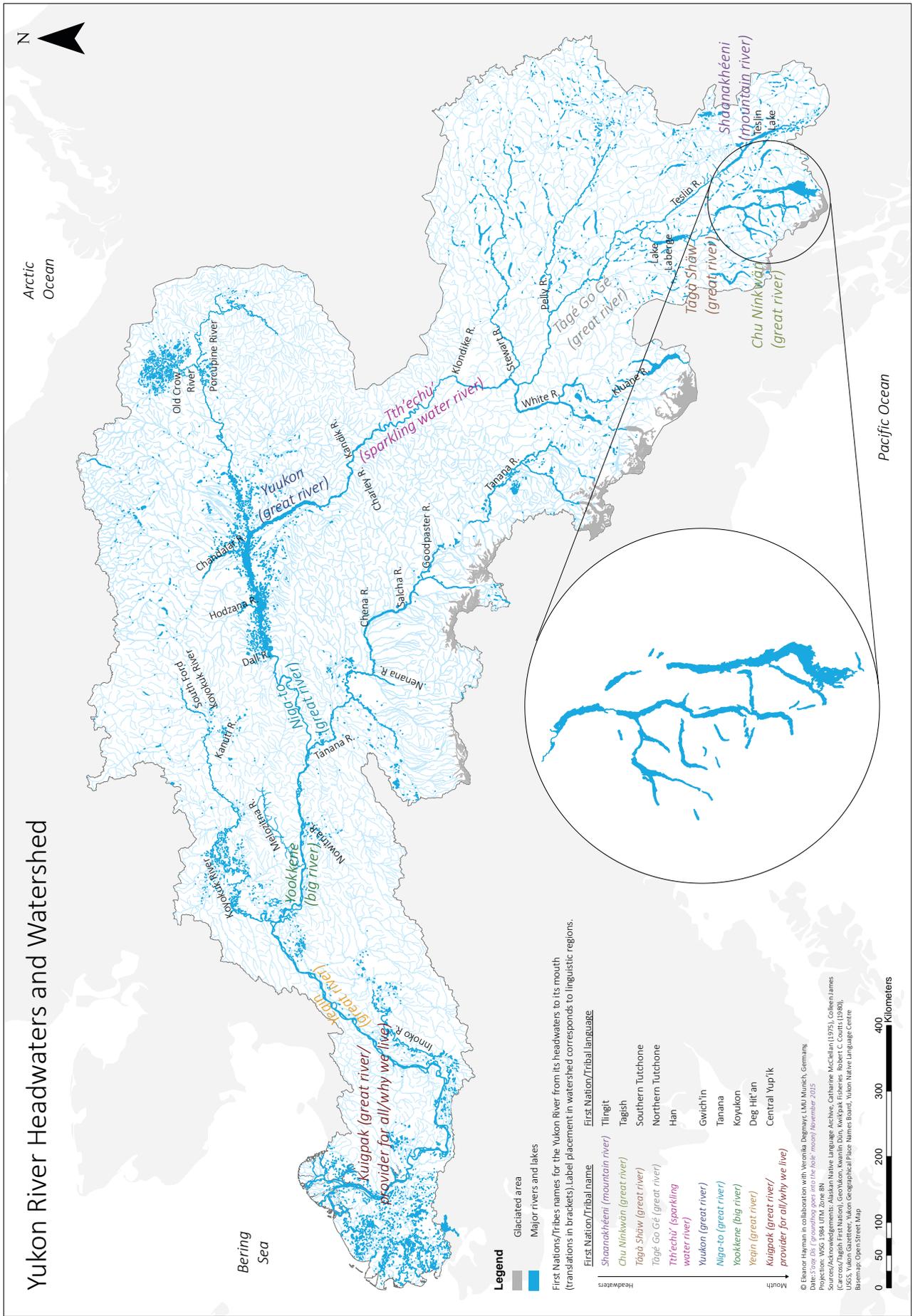
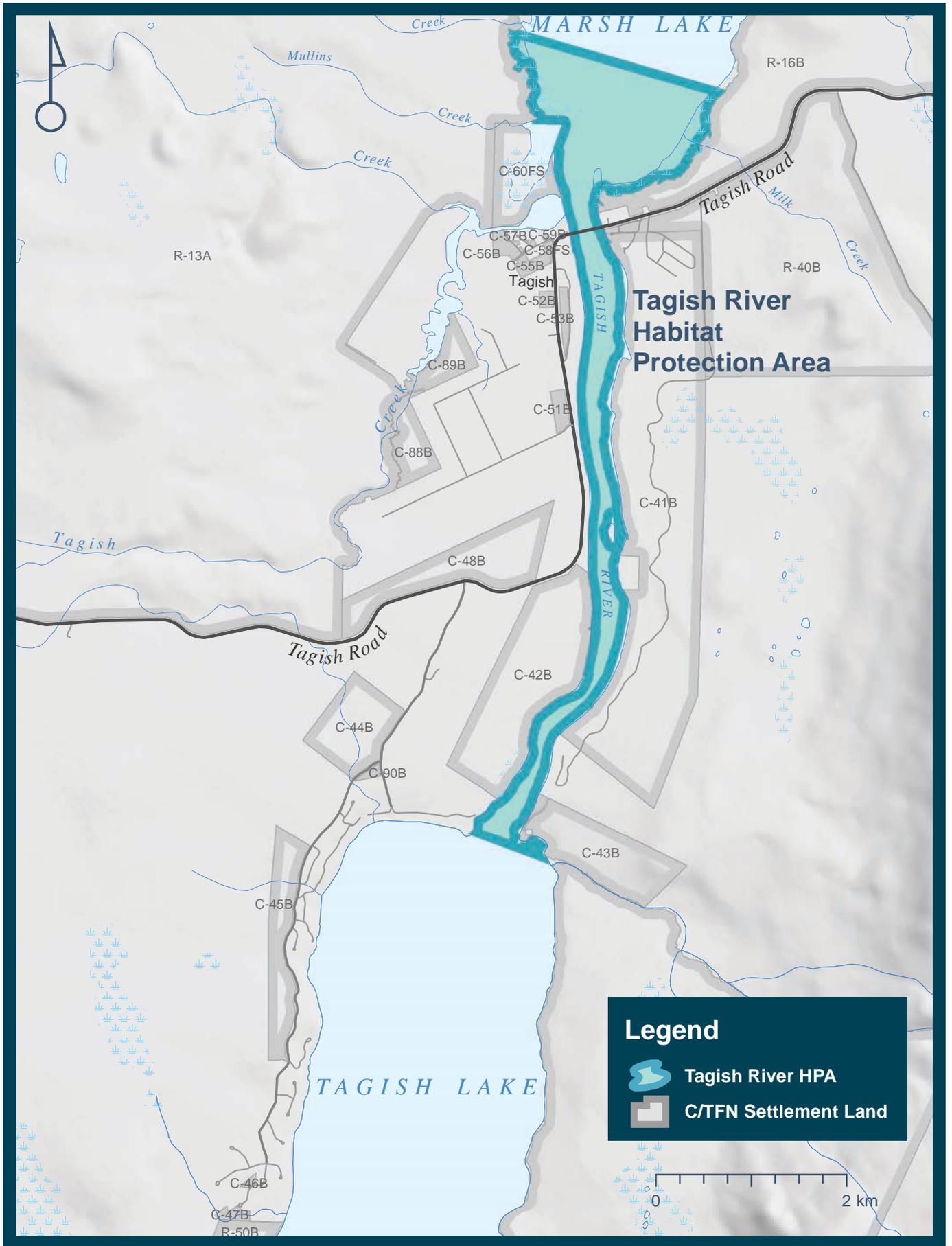
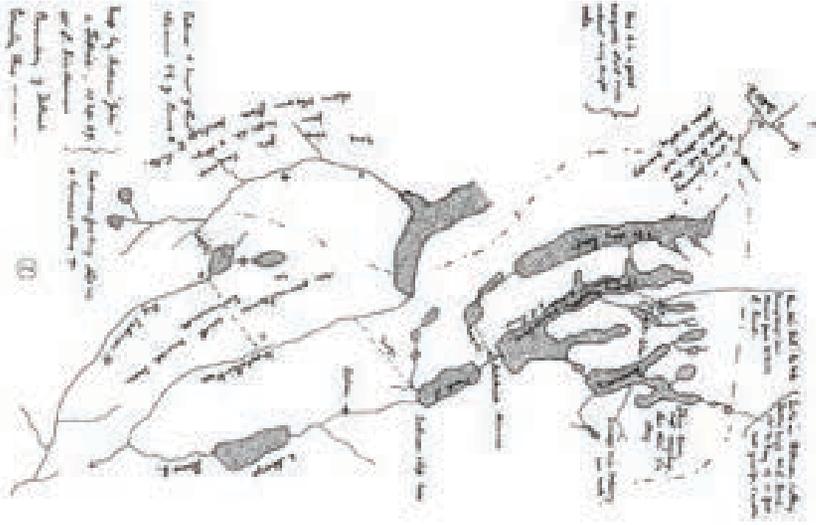
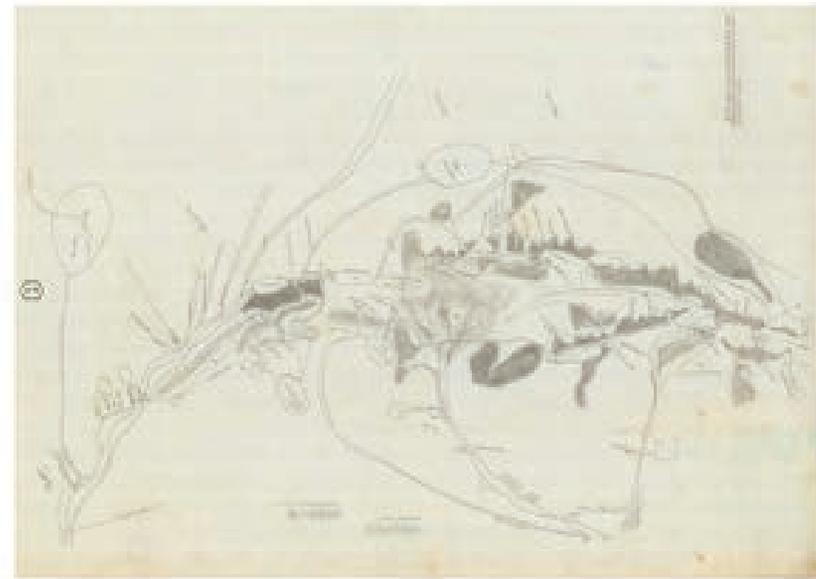


Figure 1: Yukon River Watershed





Indigenous Water Knowledge

Earliest surviving maps of the Yukon River *Shamanakheen* Headwaters hand drawn by *Tingit* and *Tagish "Indians"* (contrasted with a modern version)

- ① Drawn in pencil by *Tingit* (left) and *Tagish* (right) and accompanied this map (see 1) to the interior from *Tiglavon*, head of the river of a mountain trail. *Tingit* place names transliterated in English by George Dawson. 185 x 87 cm. Archival of the U.S. Coast and Geodetic Survey. Note the privileging of water bodies.
- ② Drawn by "Indians of the Yukon" for George Dawson (Canadian imperialist leading a geological expedition to the Yukon) on 18 September 1857 at 1500's/40 miles (London) Yukon Territory, Canada. Notations are made by George Dawson in his field notebook. Library and Archives Canada. Note that the map was drawn privileging the flow of water (streams - down-slopes) and not the geographical (N, S, E and W). Also note distance is measured in days (not with precise details of stream flow, privilege and canoe suitability).
- ③ Modern CG generated map of Yukon River headwaters (Canada/Tagish First Nation's traditional territory). Data from National Topographic Data Bank, Ministry of Natural Resources Canada, Centre for Topographic Information, WGS 1984 UTM Zone 18N

© Shanon Norman in collaboration with Inuvialuk Segunak, 14/1 March, 2020. From *500* (privately printed) the book (print) November 2015

Figure 3: Indigenous Water Knowledge

Planning objectives and process

The Steering Committee was tasked with creating this management plan following the objectives set out in the Carcross/Tagish First Nation Final Agreement, Chapter 10, Schedule C 2.0, which are listed below (the full Schedule can be found in Appendix A).

2.0 Objectives:

- 2.0.1 to establish an HPA in the Tagish River Area;
- 2.0.2 to conserve nationally and locally important Fish and Wildlife and Fish and Wildlife habitat in the HPA for the benefit of all people;
- 2.0.3 to recognize the traditional use of the Area by the Carcross/Tagish First Nation;
- 2.0.4 to recognize the current use of the Area by the Carcross/Tagish First Nation, Carcross/Tagish People and other Yukon residents;
- 2.0.5 to conserve the full diversity of Fish and Wildlife populations and their habitats from activities that could reduce the capability of the area to support Fish and Wildlife;
- 2.0.6 to recognize and honour the history, heritage and culture of the Carcross/Tagish First Nation in the area through the establishment and operation of the HPA;
- 2.0.7 to encourage public awareness, appreciation and enjoyment for the natural resources of the HPA;
- 2.0.8 to recognize the HPA as a multi-use area including uses for recreation and for the storage, use and management of water for hydroelectric production for the benefit of all Yukon people;
- 2.0.9 to provide a process to develop a management plan for the HPA;
- 2.0.9.1 to provide economic opportunities to the Carcross/Tagish First Nation and People to participate in the development, operation and management of the HPA in the manner set out in this schedule.

Tagish River HPA Steering Committee guiding principles

The Tagish River HPA Steering Committee developed a set of guiding principles (Appendix B) to describe how the parties would work together to achieve their objectives. With the Carcross/ Tagish First Nation Elders' Statement in mind, the Steering Committee agreed to a planning process based on Building Consensus for a Sustainable Future: Guiding Principles: An Initiative Undertaken by Canadian Round Tables (1993). This enabled them to address potential opposing points of view and find ways to accommodate deeply held and differing values.

Planning process steps

The following list provides a broad summary of the steps undertaken to create this management plan:

1. Information gathering of traditional, local and scientific knowledge;
2. Identification of values, issues and concerns through community engagement events;
3. Plan drafting, including a review of all the information gathered and the development of recommendations to address values, issues and concerns.



Public engagement events

The following lists all public engagement events held by the Steering Committee between 2015-2019.

- Monthly Steering Committee meetings were held to develop the management plan.
- A website was established to house information about upcoming events and the project background (tagishriverhpa.com).
- An open house was held in Tagish in May 2016 to give local residents and the general public a chance to learn more about the planning process and to provide input on their thoughts about values in the area.
- The Steering Committee attended swan ceremonies and storytelling events with Elder Ida Calmegane during the spring of 2016, 2017 and 2018.
- The Steering Committee held an event called “Fish and the Tagish River” in June 2016 during which the Steering Committee met with local residents and the general public to introduce themselves and talk about values of the area, specifically fishing.
- Booths were set up at Canada Day events in Tagish in 2017 and 2018.
- Carcross/Tagish First Nation conducted interviews to engage with citizens who either live in Tagish or are familiar with the area.
- A questionnaire was mailed out to local residents and was also posted on the website with background information on the planning process and requesting feedback. The Steering Committee is using this feedback to inform the management plan.
- A community meeting was held in Tagish in January 2017 to further allow local residents and the general public to have their say and contribute their thoughts and ideas to the management planning process.

Other planning processes

This management plan is intended to recognize and complement other planning initiatives both completed and currently under way in the Carcross/Tagish First Nation Traditional Territory, including: How We Walk With the Land and Water (Southern Lakes Indigenous Relationship Plan), the Southern Lakes Caribou Management Plan, the Southern Lakes Forest Resources Management Plan, the Tagish Local Area Plan, and the Southern Lakes Wildlife Coordinating Committee Recommendations.

The Tagish Local Area Planning process was initiated in the spring of 2015 and follows the objectives set out in Section 31 of the Carcross/Tagish First Nation Final Agreement. The Tagish Local Area Plan will guide future land use and development within the community of Tagish.

The planning area includes the developed areas of the community (**Figure 4**). The high-water mark of the Tagish River is the boundary between the Tagish River HPA and the Tagish Local Area Plan. Both planning committees recognize the interconnectedness of the river and surrounding land and have worked together to make sure that both plans acknowledge this relationship. A concerted effort was made to coordinate issue identification and management objectives within both plans, specifically waterfront use and access for both people and wildlife.

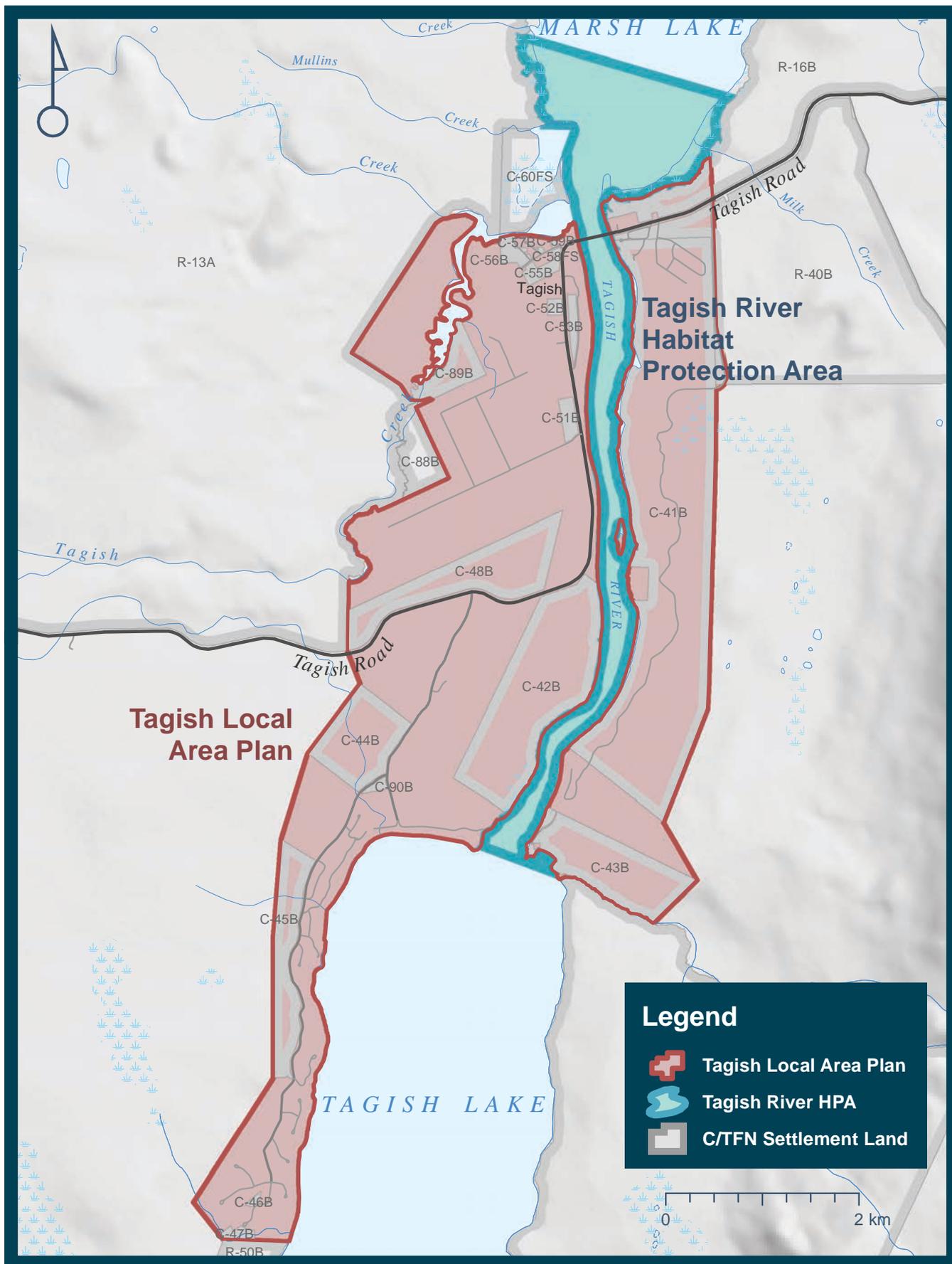


Figure 4: Tagish Local Area Planning Boundary

Spring on the Tagish River



Through the Seasons - The story of a Tagish First Nation Girl by Elder Dora Wedge

(adapted from My Old People Say by Catherine McClellan, 1979)



This is a story about a year in the life of Ya ju du hen, a little Tagish First Nation girl.

Now it was April, and the family moved back to Small Fish Lake to trap beaver. Now they had to live in a tent when they were there. N'ho helped them move and get the tent all fixed up, with spruce boughs covering the floor and the stove set up. Then he went on to Carcross with his dogs and sleigh.

Father went to the beaver dam. He chopped a hole in the ice in front of the beaver house, and lowered some poplar boughs into the water, tied to a dry log so they would float. Then he covered the hole carefully with brush, a blanket, and a canvas so that it would not freeze over again.

He left it for several days, while he picked up all his other traps. The time for trapping was now over.

Several days later, Father and Ya ju du hen went out to the beaver pond. They had to wait very quietly at the hole in the ice. Finally, Ya ju du hen saw the water moving. Father said, "Now the beaver has left his house." She watched, and soon she heard a noise. She sat as still and quiet as she could.

Father saw the beaver coming. Quick as could be, he speared it with his big spear. He jumped up, pulled the beaver on to the ice and clubbed it.

It was a great big beaver. Before they went home, they put more poplar branches in the water and

carefully covered the hole again. Then Father tied a string to the beaver's hind foot and front hand and packed it back to camp on his back.

Later, in May, the ice began to open in the lakes. Then Father shot many beaver with his gun. Now he set traps for them, too, on the shore where beaver came up to get trees.

Near the end of May, the family began to travel toward Carcross. They had lots of furs now. Father packed some and the dogs packed some. As they travelled from one camp to another, they found caches of dried fish, meat, and flour that N'ho had put in tin boxes and hung from trees. He had cached them there when he had passed by in April. When they got to Little Atlin Lake, they had to sew the covering on the skinboat again. They had carried it with them. They went along the shore of the lake until they came to the trail to Tagish.

They stopped there and set some nets for fresh fish. They waited for several days, and then Ya ju du hen's big brother Yelthshan came to meet them. He had horses with him, so now they loaded all the stuff on the horses.

When they got to Tagish, Father traded some of the furs for grub at the post there and Yelthshan sent the rest to Vancouver to be sold.

Spring on the Tagish River brings a sense of energy and awakening after a long, dark Yukon winter. It is a time of birth, innocence and learning. It is at this time that we understand the meaning of Taagish Too'e, or water breaking up, as the silence of winter is broken with the hissing of moving ice. For those of us whose connection to this land spans thousands of years, this is a time for giving thanks to the land and water through ceremony, by providing offerings to the river and sharing stories about the connection to this area that have been passed down by our ancestors (**Recommendation 1**).



Birds

In spring, the Tagish River comes alive with thousands of migrating swans, ducks and other birds. Around 130 migratory bird species return to the Southern Lakes area each year. Tagish supports regionally, continentally and globally significant numbers of waterfowl and shorebirds. The Tagish River is the second most heavily used site in Yukon by waterfowl during spring migration, trailing only the outlet of Marsh Lake near Swan Haven. This spot is one of the earliest ice-free places where migrating waterfowl can find open, shallow water to rest and access submerged vegetation. This vegetation provides sustenance

for these birds and also a place to rest before they continue their migration to their summer nesting grounds. Trumpeter Swans are the most numerous species found at this time, with more than 13,000 passing through Tagish in one season. These birds have travelled from their wintering grounds on Vancouver Island and adjacent areas of British Columbia, Washington and Southeast Alaska. Tundra Swans also come to the area in abundance, having travelled even further from the western United States. From Tagish, most of the birds will head further north into Alaska or disperse throughout Yukon for the summer. While many birds leave, others remain to breed and raise their young on the river. Shorebirds migrate through the area later in the spring and feed on invertebrates on the mud flats.

The Carcross/Tagish First Nation people hunt waterfowl and other birds both for food and for their downy feathers, used as insulation and for ceremony. Migratory birds are respected and honoured in story. Resident birds include woodpeckers, chickadees, finches and Ravens among others. Raptors found within the Tagish River HPA include, eagles, Osprey, falcons, and owls. Ravens (crow) are important to Carcross/Tagish First Nation and to other Yukon First Nations. Crow is one of the two Carcross/Tagish First Nation moieties, and is an important part of the Carcross/Tagish First Nation creation stories.

During public engagement, community members in Tagish voiced concerns about people and their dogs harassing migratory birds during this important stage in their migration, as well as concerns about early use of the Tagish River by boaters and off-road vehicle users when swans are arriving in the spring. In general, there was consensus that residents and visitors value the migratory birds in this area and want to protect the opportunity to view them (**Recommendations, 7, 8, 15-19**).



Changes in behaviour in response to human disturbance is the most common impact on birds within the Tagish River HPA during spring staging and the breeding/nesting period. One of the main objectives of this management plan is to ensure that the Tagish River continues to be a safe and productive habitat for birds.

Migratory birds using the Tagish River for spring staging are vulnerable to disturbances from motorized and non-motorized boats, off-road vehicles, unleashed dogs, roaming cats, and people walking and taking photographs, among other things. Depending on the type and frequency of disturbance, birds may reduce the amount of time spent resting and foraging instead becoming more vigilant and actively avoiding the perceived danger. This depletes much-needed resources such as fat stores and energy for further migration, nesting and eventual breeding.

Specific risks include:

- Direct mortality of waterfowl/shorebirds due to off-road vehicle impact on ground nesters or predation by cats and dogs.
- Indirect mortality or reduced survival due to poor body condition from less time eating and resting and more time watching for predators or escaping perceived danger by diving and/or flying.
- Birds abandoning the staging area and moving to other nearby locations, which may

become over-crowded in the spring due to limited open water.

- Reproductive difficulties if migrating birds arrive late to breeding areas or have lower fat reserves.
- Reproductive difficulties for birds that nest close to water, e.g. gulls and geese, by boat disturbances and their wakes.

The Man in the Moon by Angela Sidney, Tagish

One time a little person put snares out for swan. Swan took off with them. He slept on that swan's back. There is a flock of swans. They land on some big lake, maybe Kluane Lake.

After they land in middle of that lake, swans flew up again, left him. Once man saw something back down there on that lake. Here it was that little person. So that man brought him home.

That little person never blinks, never sleep. When everyone else sleep, he sit up all night. He cry. Long time he stay amongst people. Finally they boil blood soup – caribou blood. He didn't want to eat it but they tell him to. So anyway, he eat it.

Next night, by gosh, he disappear. Morning they wake up, he's gone. Before people go to bed that night they hear somebody crying.

"I don't want to eat that soup, but you made me. You kill me."

That's how come he's up in the moon.

"I'll keep my bucket of blood."

You see that too. Just like he's carrying that bucket in his hand.

Species at risk

The *Species at Risk Act* (SARA) was put in place in 2005 by the Government of Canada to prevent wildlife species in Canada from disappearing; to provide for the recovery of wildlife species that are extirpated, endangered, or threatened as result of human activity; and to manage species of special concern to prevent them from becoming threatened or endangered.

Species assessed as at risk by COSEWIC and given status under SARA within the HPA or that use the HPA as a movement or migration corridor include:

- Northern Mountain Population of Woodland Caribou
- Grizzly bear
- Wolverine
- Little Brown Bat
- Bank Swallow
- Barn Swallow
- Common Nighthawk
- Olive-sided Flycatcher
- Horned Grebe
- Red-necked Phalarope
- Rusty Blackbird
- Short-eared Owl
- Western Bumble Bee, *mckayi* subspecies
- Gypsy Cuckoo Bumble Bee
- Transverse Lady Beetle

There are no documented plant species at risk (including aquatic) within the Tagish River HPA, however this may be due to a lack of inventory work rather than an absence of species (**Recommendations 23, 24 and 28**).

The Species at Risk Registry and Government of Yukon's Species At Risk website should be consulted for the most up to date information as Schedule 1 listed species and COSEWIC assessments of species are updated regularly.

www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html & <https://yukon.ca/species-risk>





Wildlife

Spring is also the time when caribou and moose begin their movements to their preferred calving areas. In the caribou's case, they move from their wintering grounds around Marsh Lake and Tagish to summer ranges on Jubilee, Nares and Montana Mountains, stopping to give birth to their calves along the way. The Tagish River is important for migrating caribou, acting as a natural funnel to an easy crossing when the lakes are open or unsafe to cross. Winnie Atlin describes the great number of caribou that roamed the southern Yukon:

“the most caribou I’ve seen in my whole life... there was about forty or fifty, maybe more. You can just see that mountain (Nares), it’s going like that with caribou. There was so many caribou there.”

Winnie Atlin, Carcross Elder Carcross Tagish Traditional Knowledge Project 1995:Pp.19.

The caribou in this area are part of the Carcross caribou herd which is a population of Northern Mountain Woodland Caribou that resides in the Southern Lakes region of south-central Yukon and northern British Columbia. The Carcross caribou herd along with the Laberge, Atlin and Ibex caribou herds are collectively known as the Southern Lakes caribou herds. By the early 1990s, due to hunting, predation and development within their range, the Carcross caribou herd declined dramatically to about 400 animals.

In 1992, concern over declining caribou numbers in the Southern Lakes region led to the Carcross Caribou Recovery Program, initiated by Carcross/ Tagish First Nation. During this time, most hunting was stopped by way of a seasonal closure for licensed Yukon hunters, while First Nations implemented a voluntary harvest closure. These measures to increase the herd size are still in place. Between 1997 and 2008, the Carcross caribou herd roughly doubled to an estimated population size of 800.

Today, the Carcross caribou herd's range includes Whitehorse, Carcross, Tagish, several other smaller communities and many nodes of dispersed country residential properties (Figure 5) Approximately 80% of Yukon's total population lives within the Carcross caribou herd's range.

As a result of transportation, industry, tourism and recreational land uses, large portions of the herd's winter range, and many once-remote areas, have

become accessible. While harvest limitations have been successful from a population perspective, the herd remains vulnerable due to the cumulative effects of habitat loss, fragmentation and other human activity.

Moose are another highly valued species in Yukon and are a frequent and enjoyable sight on the Tagish River. The subsistence culture of First Nations has been closely tied to moose harvest for generations. Today, moose is the most widely hunted wildlife species in Yukon by both First Nations and non-First Nations.

During spring, moose calve in the wetlands amongst the shoreline vegetation that provides cover and food in the form of new willow shoots. Cow moose prefer to calve in isolated areas to avoid predators and are frequently observed with their calves at the confluence of Tagish Creek and the Tagish River.

Moose numbers in the region, particularly those in accessible areas, declined in the mid-1980s as a result of overharvesting. Harvest restrictions were implemented in the early 1980s for licensed hunters, which has greatly reduced the annual harvest.

The Tagish River is particularly important during the off-ice or shoulder seasons when the lake ice is unsafe. The Tagish River allows for movement of caribou, moose, bears and many other species both large and small. Wildlife corridors facilitate movement and allow for greater support of species richness. The Southern Lakes region is made up of large, extensive waterbodies that create migration and movement obstacles. Other important wildlife corridors in the Southern Lakes include Nares Mountain, 10 Mile, the Golden Gates near Graham Inlet and the Atlin River. Many of these corridors have seen and continue to see high development pressure. With increased development and habitat fragmentation in this area, corridors such as the Tagish River become even more important. Within the Tagish River HPA, the current area suggested as a local wildlife corridor extends past

the HPA boundary. The suggested area is mostly undeveloped and has been identified by traditional and local knowledge as a crossing point for caribou and other wildlife (**Recommendations 17-22**).

Caribou, moose and other four-legged creatures may be disturbed in the spring from recreational and residential use of the Tagish River HPA. Activities that may cause disturbance include: motorized boats, off-road vehicles, the presence of large numbers of people, shoreline development (removal of riparian vegetation and construction of docks and structures within Ordinary High Water Mark or the 30-metre setback), and unleashed dogs. There is a risk of wildlife abandoning or avoiding the Tagish River due to removal of important riparian habitat and general human-caused disturbance (**Recommendations 15-22**).

Both Grizzly and Black Bears will start to emerge with the spring thaw, becoming more visible, yet another sign that spring has started. Many Carcross/Tagish people believe bears possess spiritual powers and give human attributes to them. Often sow bears will be out exploring with their new cubs.

Semi-aquatic furbearers become more visible in spring: beaver and muskrat emerge from their winter refuge under the ice, otters fish in the open water and muskrat forage on the shoreline. Other furbearers on the Tagish River include marten, wolverine, coyote, fox, snowshoe hare, ermine, mink and lynx. Spring is time for the traditional harvest of birds, beaver, muskrat and gopher. Trapping has been, and continues to be, an important practice in this region.

Spring is also the time when wood frogs emerge from their winter torpor to breed in the shallow waters just outside the boundary of the Tagish River HPA, north of the Tagish Bridge.

As the days grow longer and the ice fades, the waters become more productive, plankton multiplies and insects emerge. Many fish take advantage of this increased productivity and move into the river to feed. As the ice moves and breaks



apart, natural erosion of the river bank often occurs, slowly but surely altering the river landscape.

Traditional fisheries for whitefish and cisco are beginning. They are soon followed by lake trout, which spend time foraging on smaller fish before migrating to the larger waters of Tagish and Marsh Lakes. Recreational anglers arrive to pursue lake trout, using both the Tagish Bridge and boat launch. This continues into summer when the waters warm (**Recommendation 1**).

Climate change

In Yukon, the annual average temperature has increased by 2°C over the past 50 years; twice the rate of southern Canada and the rest of the world. Climate change is already impacting local environments with variation in river and lake water quality, increased average temperatures, fluctuation in annual precipitation, thawing permafrost and changes to the diversity, health and distribution of wildlife. A recent study indicates that by the year 2100, 80% of the glaciers in British Columbia and Yukon will have disappeared.

The future impacts of climate change are unknown and have the potential to significantly alter the Tagish River HPA. Climate change is a complex challenge and due to the lack of certainty regarding its impacts in the future, adaptive decision making and risk management are required (**Recommendations 28,27,and 30**).



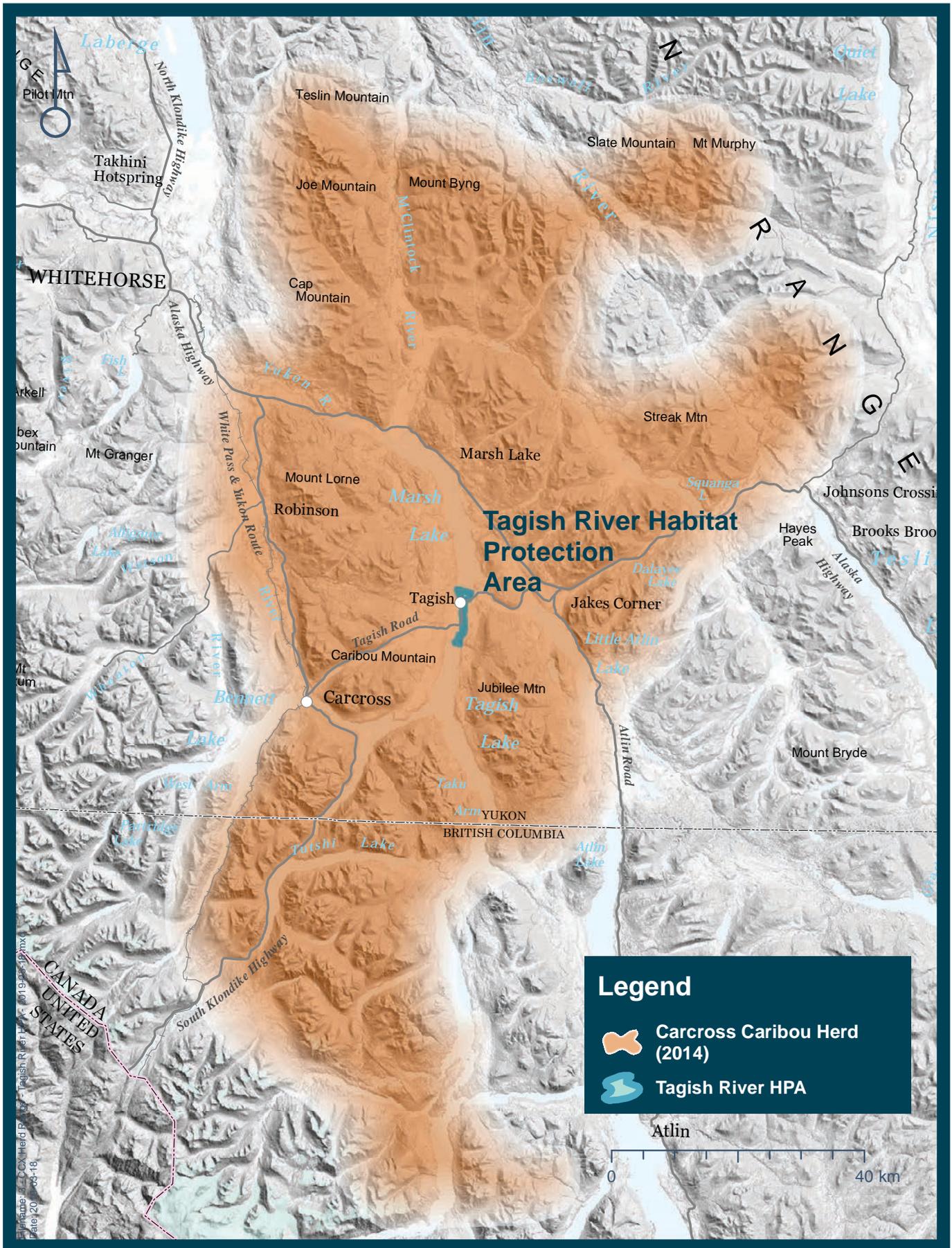


Figure 5: Carcross Caribou Herd Range

Summer on the Tagish River





Through the Seasons cont. by Dora Wedge

Now it was the early part of June. It was a time for meeting friends and relatives and going visiting. The family travelled to Carcross and stayed there for a while.

Now, it was August, and time to pick berries. They went up toward Bennett Lake where they found blueberries, cranberries, currants and raspberries. They packed along a little stove, and glass jars, and cooked the berries as they picked them.

Then they came back down the mountain and went back down Bennett Lake to Millhaven. They trapped gophers and groundhogs there. They skinned some so that Mother would have fur to make a new robe. They just singed the hair off the rest. They cleaned the gophers and groundhogs and then dried them for food.

They caught some big trout there too, and dried them for winter food.

Then they went back to Carcross and stayed until September. And then it was time to start back to Little Atlin again.

Summer is a time for youth, love, loyalty, sensitivity and getting outside. In Yukon, we tend to start summer later than in southern Canada, marking the passage of spring with the retreat of ice from the lakes and the emergence of leaves on the trees. The longer days bring us out of a feeling of hibernation and our energy increases.

Tourist traffic increases dramatically in the summer, and the Tagish campground and bridge become a hive of activity. This is the norm for June through to August as tourists and weekend residents cause the local population to swell. It has been estimated that on a long weekend, several thousand people can be in the Tagish area (**Recommendations 7 and 8**).

Birds

By this time the swans have resumed their journey northward, and shorebirds are migrating into the area to feed on invertebrates in the mud flats. The Tagish River provides a full range of habitats to birds and other wildlife. Waterfowl, loons, grebes and songbirds like the Rusty Blackbird (listed as Special Concern on Schedule 1 of the *Species at Risk Act*) come to search for food and safe places to build their nests and raise their young in the vegetation along the shoreline. Other species like Chickadees, woodpeckers and several species of ducks, e.g. the Common Merganser and the Bufflehead, are using cavities in standing dead trees along the shoreline to build their nests.

Generalist species, such as the American Robin, will use disturbed sites, specialist species, such as the Olive-sided Flycatcher, favour old spruce forests in riparian areas for nesting and raising their young.

Bank Swallows make their nests in river bank burrows along the Tagish River while Cliff Swallows use mud to attach their nests to the underside of the Tagish River Bridge and other locations. These birds have both seen their populations decrease since the 1970's.

The typical nesting period coincides with the highest use of the Tagish River for recreational, residential and infrastructure maintenance activities.

This leads to potential conflict between human activities and breeding birds.

While birds are nesting they are especially vulnerable to habitat change and destruction in the Tagish River HPA. Habitat changes may be caused indirectly as a result of climate change. For example, the emergence of vegetation and insects is based on local conditions such as temperature, water levels and sunlight, whereas migration timing for most songbirds is based on the time of year and its corresponding light level, sun cycle and wind patterns. Climate change can result in birds arriving in the Tagish River HPA to nest after the peak emergence of vegetation and insects, which may have shifted due to warmer local conditions.

Direct habitat change in the Tagish River HPA could result from various local activities, including land clearing associated with development. The *Migratory Birds Convention Act* prohibit the disturbance or destruction of migratory bird nests and eggs and the deposit of harmful substances in



waters or areas frequented by bird species listed under the Act.

Specific risks include (**Recommendations 11 and 12-22**):

- Reduced reproductive success due to a mismatch of nesting and peak insect emergence as a result of climate change.
- Loss of nesting and/or foraging habitat from land clearing, fire smarting programs, bridge maintenance, and other development activities.
- Loss of nesting habitat for Bank Swallows due to increased shoreline erosion from boat wakes or higher water levels from hydro-electricity generation.

Repeated and constant disturbance from activities such as boating, off-road vehicles, walking along the shoreline, unleashed dogs and outdoor cats, may cause birds to alter their behaviour. This could lead to less time spent incubating their eggs and feeding their young, increased frequency of



distraction or predator response behaviours and in some cases may result in birds abandoning their nests.

Specific risks include:

- Mortality due to human activities (pets, off-road vehicles).
- Reproductive failure due to abandonment or depredation of nests.



The Blind Man and the Loon by Jimmy Scotty James

Catherine McClellan 2007, *My Old People's Stories*
Part II Tagish Narrators; Pp 422-423

There is one man who is blind—he can't see anything. His wife leads him around all the time. He can't see. His wife get tired, I guess.

After a while, they are moving the camp. By gosh, they come out on a ridge, and by gosh, there is a big bull caribou coming to them, straight at them. His wife tells the old man, "A caribou is coming!" And by gosh, he takes his arrows out and he says, "You move my hand which way the caribou is, and tell me when to let the arrow go" As soon as the caribou is coming straight to them, she says, "Let her go!"

So he hits the caribou all right, but the caribou runs away. Then that woman gets mad and runs away and leaves that man. He hollers, and he hollers, and he tries to follow. I don't know how many days he's out there, crawling around. After a while he hears a loon hollering. And the loon is his *íxt'* (Tl., "doctor" or spirit helper).

Finally he finds a little lake down in there, and he goes there. He crawls in there. Every time he hollers, the loon hollers. When he's pretty close to the lake, he hollers again. And he is just walking. He gets his hand into the water, that old blind man, and he stops there.

And that loon, just at that minute, comes to him. And that loon asks him, "What's wrong with you anyway? Where are your people?"

He says, "My wife ran away. I'm blind."

Then the loon says, "You come on my back!" And the loon dives at this end of the lake and he says, "You put your face on the back of my head, and don't look up!" And the loon comes out of the other end of the lake. And then he goes back the

same way again. And a third time he goes back again. And then he comes to the other side of the lake again.

And then the loon tells the man, he says, "Look up. Try to look up. See if you can see." By gosh, the man sees the timber a little bit. The loon tells him, "You do it again." And the loon dives to the other end of the lake again to go back for the fourth time. And he comes out this end.

And the loon tells the man, "Look up again. See if you do better."

By gosh, that old fellow is just seeing good. It's just like he is sixteen years of age!

And the loon tells him, he says, "Your wife is just up here a little ways, where you kill the caribou. You go there", he tells him. By gosh, he goes there. He sees the smoke quite a ways.

That woman sees him coming, and just grabs her moccasins. And she tells the man, she says, "I was just going to look for you."

That's all.



Wildlife

Caribou are now spending much of their time seeking out high-quality food to build up their strength for winter. Carcross caribou spend non-winter months in alpine areas throughout their herd range (**Figure 5**). This includes mountains adjacent to the planning area, such as Jubilee, Caribou and Nares. Although most of the herd's summer range is in Yukon, a portion falls within British Columbia.

At this time, moose may be observed eating aquatic vegetation throughout the Tagish River and adjacent areas, especially at the outflow of Tagish River into Marsh Lake.

During the summer, bears will be fattening up, with more sows and their cubs observed as boars will be spending more time in the high-quality habitat found in the alpine. However, for a short period in early summer these territorial four-legged creatures will cross paths for mating. Bears will breed every

3-4 years in Yukon. Cubs will stay with their mothers for 2-3 years before heading out on their own. Risks to bears include continued encroachment of development within their ranges and human-bear conflicts, often due to improper storage of garbage and other bear attractants on properties.

Life on the river

Boating on the Tagish River is a popular recreational activity. There are currently two public boat launches within the boundary of the Tagish River HPA. One is at the western end of the Tagish River Bridge and is part of a day-use area managed by the Government of Yukon. The second is on the east side of the river and is an extension of the Tagish Campground. It is owned and managed by the Carcross/Tagish First Nation. There are two other boat launches within the Taku Subdivision located on Tagish Lake just outside the Tagish River HPA boundary.

The Tagish Bridge Recreation Site launch is the most actively used, as it is in deeper water and allows for earlier spring access to the river. The other three boat launches can only be used when water levels are higher.

Local residents have noticed an increase in the number, size, and speed of boats on the Tagish River and have voiced concerns about accelerated erosion of the river bank due to high wakes from large and fast boats. In the summer of 2018, an ancient grave site was exposed due to ongoing erosion. There is also concern about how the increased boat traffic could be affecting water quality and shoreline erosion.

The surface geology of the Marsh and Tagish lakes area helps explain some of the shoreline erosion observed. The north end of Tagish Lake has two large areas with a high bank of erosive shoreline. In addition to the aspect of these shorelines, the surface geology mainly consists of high banks of a glaciolacustrine deposit consisting of clay, silt and sand. These deposits are not cohesive and thus very susceptible to erosion. In addition to wave attack, water flow in the Tagish River is likely contributing

to the high level of erosion.

Use of the boat launches in the Tagish River HPA has increased dramatically over the years as the popularity of recreational activities in the Tagish and Marsh Lake areas continues to grow. The two boat launches are used primarily to access fishing opportunities in the Marsh and Tagish lakes via the Tagish River. Not only have numbers increased, but the size of trucks, boats and trailers has grown as well. Under current and anticipated usage, the size and configuration of the Tagish Bridge Recreation Site is nowhere near adequate to safely accommodate the traffic. Due to this congestion, some people have created their own personal boat launches, causing additional habitat destruction, erosion and shoreline degradation. The Tagish River Bridge is also a popular fishing spot as it is a unique opportunity for summer lake trout fishing to be done without a boat. Many people use the Tagish River Bridge for this purpose and park in the Tagish Bridge Recreation Site.

Accessibility of boat launches may encourage early use of the river when migratory birds are still present during spring staging. This is dependent on



ice conditions, but climate change may make this an ongoing and earlier possibility. A high volume of river users in early spring can disrupt birds' feeding and resting activity. This increases boat traffic on the river with the attendant problems of wildlife disturbance, erosion, and boating safety concerns (**Recommendations 10-14**).

Increased river traffic, particularly from larger boats, and the resulting disturbance to wildlife and the river bank particularly in the fall when the water level is highest have all been concerns raised by community members. These disturbances are known to negatively affect shore-nesting birds, degrade riparian habitat as well as increase shoreline erosion due to larger wakes. Fuel spills, pollution from boats and turbidity generated by erosion are detrimental to water quality, affecting fish and wildlife habitats as well as residential drinking water.

Fish

The Tagish River provides habitat to many fish species throughout the year. The river works as a migration corridor as well as a rearing and over-wintering habitat. Species found in the river include lake trout, northern pike, Arctic grayling, lake whitefish, round whitefish, pygmy whitefish, least cisco, inconnu, burbot, longnose sucker, slimy sculpin, and lake chub.

Historically, the Tagish River has been important for subsistence harvest, with several Carcross/Tagish First Nation families operating fish traps and nets in the river. The practice of netting and trapping in the river has decreased in recent times due to the increase in recreational users on the river making netting a safety concern. Maintaining traditional connections to the river is an important value for the Carcross/Tagish First Nation and there is a desire to encourage this practice within the Tagish River HPA (**Recommendations 1-5**).

Fishing activity in the river tapers as the water warms and lake trout move to cooler waters in the lake depths. It is at this time that Carcross/Tagish

people construct drying racks and caches to dry fish for the winter months.

The Government of Yukon has completed angler harvest surveys at the Tagish River Bridge since the early 1990s. Due to the high level of use, monitoring of this fishery continues to be a priority. These surveys together with other stock assessments help to determine the sustainability of the fishery. Biological data is collected as part of these surveys, including lake trout age, weight and length, as well as genetic samples.

The Tagish River Bridge fishery has been managed by the Government of Yukon as a Special Management Water since 1995/96, which means fishing must be done with barbless hooks. The catch and possession limits for lake trout are one fish per day and slot limits do not apply as the bridge is not a good place for live-release fishing.

The Government of Yukon is currently studying lake trout movement throughout the Southern Lakes. So far the data has shown that lake trout move considerably throughout the area and that this movement is seasonal. More details will become available as the data is analyzed.

The Carcross/Tagish Renewable Resources Council and the Carcross/Tagish First Nation have initiated a study on cisco in the Southern Lakes due to concerns of decreases in the population found in the Tagish River and other nearby waterbodies. There is one commercial allocation for cisco on the Tagish River. In 2004, a snagging permit was introduced for cisco harvest and there are about 50 permits issued each year. Data collected in 2018 indicate there are cisco spawning areas at the south end of the river and that these spawning areas may overlap with the Tagish River HPA boundary (**Recommendations 30, 31**).

Community members had concerns that the maintenance of the Tagish River Bridge and from residential activities, boats and public use are negatively impacting water quality, fish health and fish populations. There are also concerns that Pennycook Creek, which enters the Tagish River

HPA at its southernmost end and has some active placer claims, could have harmful effects on fish populations.

Concerns and risks for fish in the area during the spring and summer include (**Recommendations 11-13**):

- Long term sustainability of the Tagish River fishery due to increasing popularity of fishing from Tagish River Bridge.
- Increased waste/litter from large numbers of anglers in a small area;
- Discarded monofilament and lead sinkers that can harm wildlife;
- Large and old fish being caught that are critical to the genetic strength of the species. There is no size limit on lake trout due to the mortality rate of catch and release fishing off the bridge.

Invasive species

Invasive species can harm native species by bringing disease and altering and impacting ecosystem health. Both aquatic and terrestrial invasive species are spread when people and their equipment move from place to place.

Invasive species can cause changes in soil nutrients, increase fire frequencies, change in nesting behaviour, erosion, pattern etc.

Currently, we do not have a good understanding of the extent of aquatic invasive species in Yukon. We do have the opportunity, however, to prevent the spread of invasive species through education (**Recommendation 10**).



Fish Guts Recipe

A good recipe when you have more than one whitefish!

Ingredients:
Cleaned fish intestines
Flour
Salt and pepper
Lard or olive oil

Clean the fish and keep the intestines, splitting them open and cleaning them out thoroughly. Mix some flour, salt and pepper together in a bowl. Toss and coat the intestines in the flour mix.

Heat up a frying pan on the stove with enough olive oil or lard to fry the fish intestines.

Fry until crispy. Enjoy!

Thank you to Annie Auston for sharing this recipe with the community.

Moldy Head: The Boy who Stayed with Fish by Elder Angela Sidney

from *Life Lived Like a Story* by Julie Cruikshank

One time there was a little boy who lived with his mother and father.
People dry fish – that’s how they rustle for food.
If they do that, they don’t have much hard time in winter when it’s hard to rustle for game.
And so this little boy always cried for food in the evening,
Before he goes to bed his mother always gives him dry salmon, head part.
Here he tells his mother,
“How come it’s always moldy?”
He gets disappointed, throws it away.
“U de tla” he says. “It’s moldy.”
Anyway, his mother gave him another one again, always.
Every now and then, like that, it’s moldy.
But he said something wrong against the fish spirit,
“hut kwani”
So the next year, they go to the same place –
That’s where they dry fish.
They were there again.
Here, his mother was cutting fish.
Any you know how seagulls want fishguts all the time?
Here he set out a snare for that seagull.
Set out a snare to catch him.
Anyways, that toggle wasn’t very strong or very big or very heavy.
And seagull started to drag it out.
That little boy started running after it.
He ran in the water to try to catch it.

Pretty soon, he fell in a hole.

He caught it, I guess, but they couldn’t save him.
And here right away the fish spirit grabbed him – they saved him.

And when the fish went back to the ocean, they took him.

But for that boy, it seemed like right away he was amongst people.

They got a big boat, and they took him with them down to the fish country.

They came to a big city, big town –

Oh, lots of people run around, kids playing around.

One time they’re playing outside and the little boys see fish eggs.

He starts to eat some.

He doesn’t know what those people eat – he never sees them eat anything.

Here, he starts to eat fish eggs.

Here, someone called out Shaatláax, “Moldy Head.”

They call him that because he used to call fish moldy.

“Moldy Head eats someone’s poop,” they said.

Here it was fish eggs.

On, by gosh, right away he gets shamed!

When the kids come home, they tell older people about it:

“Moldy Head eats people’s poop.”

Next morning, adults tell them,

“Why don’t you kids go play around that point, play ball.

While you play, you catch fish.

But when you eat it and when you cook it

Don’t let anything fall in the hole, that cooking stick hole, where they put the stick in to roast fish.”

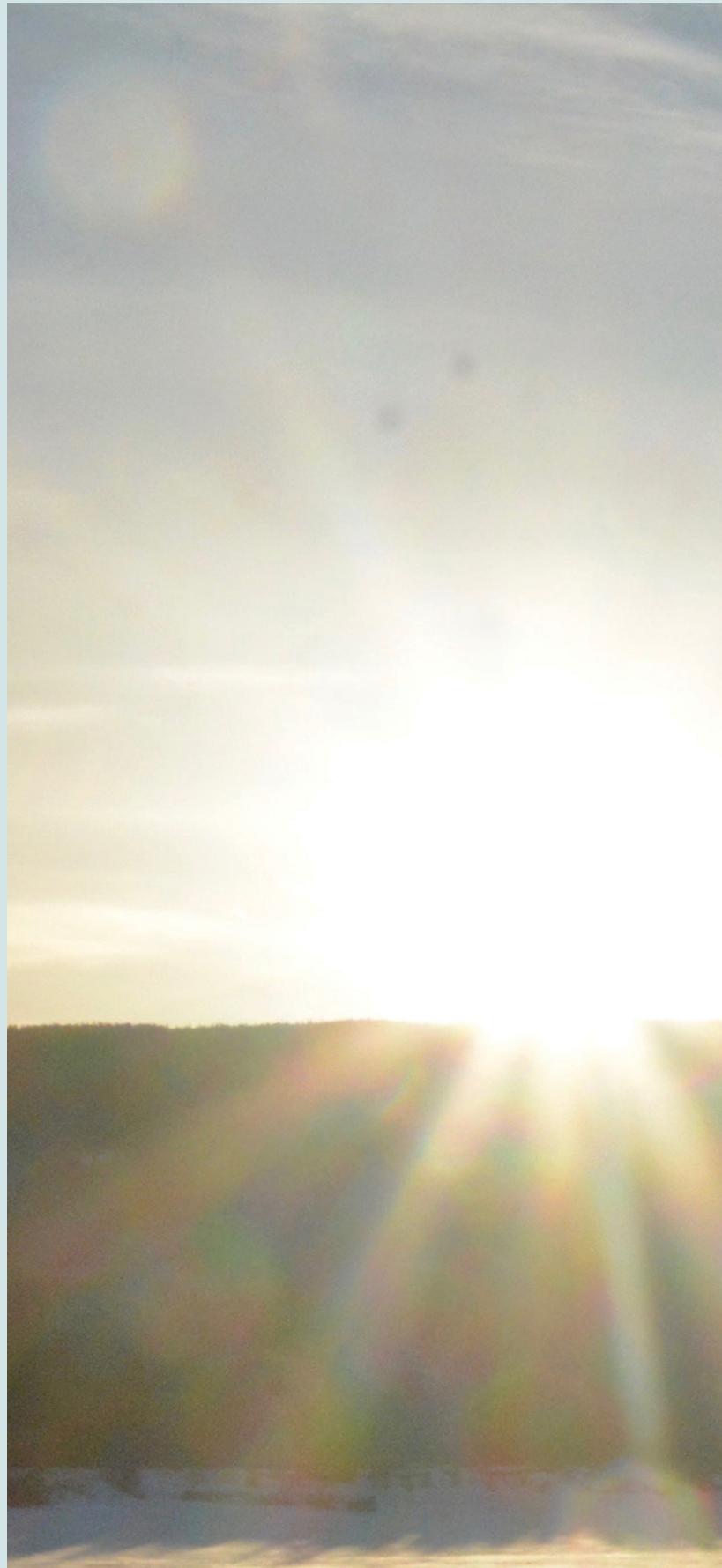
So they make fire and one lady sees fish and clubs it and cooks it for him.

Now and then when he gets hungry, they do that

for him. In the evening when they come home,
Here that boy never came home until last.
They told him,
“Throw the bone and skin and everything into the
water,
But don’t let anything fall into the cooking stick
hole.”
He threw everything into the water except that one
eye.
It fell in the cooking stick hole.
They didn’t see it – the lost eye.
So when they came home, that boy has got one
eye missing
He came back to life again, and he’s missing one
eye.
It fell in the cooking stick hole.
So when they came home, that boy has got one
eye missing.
He came back to life again, and he’s missing one
eye.
The parents tell him to go back – look in that
cooking stick hole.
See if there’s anything there.
So they went to the playground,
And sure enough there is fish eye there.
He picked it up and he threw it in the water.
And when he came back, all of a sudden
That boy has got both his eyes back.
Finally, springtime started to come.
Everybody started to get ready to go up the river
again.
That boy stays with those people that adopted him
first and they all go up the river again.
They come to that same place – “Hee hut, hee
hut,” they pole upriver.
That’s how come they know where to go:
They say when the fish go up the river

Their great-great-grandmother is at the head of the
creek.
And that’s why they go up to visit the great-great-
grandmother, that fish –
They come back to the same place.
Here he sees his human mother –
His mother is cutting fish.
He goes close to his mother.
Just the same, his mother never paid any attention
to him –
It was just a fish to her.
I don’t know how many times she tried to club that
fish
But it always takes off.
So finally, she tells her husband about it.
“How come that one fish always comes to me and
just stays right there all the time?
But after when I go back to see him, that fish is
always gone.
Why is that?
“I don’t know why that is.
Let’s try to kill it,” he said.
“You know we lost our son last year.
Could be something. Must be something.
Let’s try to catch it, okay?
So they did. Anyway, they got it.
And here she started to cut that fish.
And here that fish had copper around his neck
Just like the one that boy used to wear all the time.
And that’s the one when that lady started to cut his
head off,
She couldn’t cut the head off.
So she looked at it good.
Here she saw this copper ring on his head.
So she told her husband right away.
“Look at that. What’s this here?

And her husband said,
“Well, you know, our son used to wear a copper
ring all the time around his neck.”
Yes they remembered that.
So they washed it good.
And then they took it home.
There’s an Indian doctor there, too.
And the Indian doctor said,
“Put it in a nice clean white skin.”
Old people used to have lots of that.
They put it in a nice clean skin.
Covered it with down feathers.
Then they tie it way up to where the smoke goes
up,
Smokehole.
That Indian doctor told them to go fast for eight
days.
So people fasted for eight days.
The Indian doctor said,
“If you see feathers blow up,
Then you take it down quick.”
So they put the body up there,
Fasted for eight days.
That Indian doctor sang all the time.
They were singing, too, I guess –
Got to help the doctor sing.
Finally, on the eighth day, here they see the feather
blow up.
They take it down quick.
Here that little boy comes to life again, in human’s
body.
They brought him back to life.
That’s how they know about fish.
That’s why kids are told not to insult fish.
And kids are not to play with seagull because that
happened.





Water quality

Many residents living along the Tagish River have their own wells and many drink water directly out of the river. In summer, the Tagish River water levels are beginning to rise as water from winter snow pack, glacier melt, and rainfall begin to fill the lakes, often later in June or into July. Several tributary streams flow through the area, including Tagish Creek and Pennycook Creek.

As summer progresses, the river's water level rises until it peaks in mid-August, dependent on the depth of the winter snow pack as well as precipitation. During public engagement, concerns were raised about water quality being impacted by high levels of recreational activities in the spring and summer months, run-off from residential lots along the river, inputs or spillages of gas and oil from boating and off-road vehicle use, as well as inputs from construction activities, land clearing and bridge maintenance. Community members also voiced concern about water-level changes from natural processes (snow melt, glacier melt and precipitation), which are becoming less predictable due to climate change.

Government of Yukon's Water Resources Branch coordinates the Water Survey of Canada's monitoring station on the Tagish River Bridge, collecting information on water levels and discharge. The Water Resources Branch also maintains a water-quality station on Marsh Lake, downstream of the Tagish River. Monthly data collection has been occurring at this site since 2005, and there is additional information from 1990 to 1997. Since the site was installed, water samples have been graded "excellent" according to Canadian Environmental Quality Guidelines.

In the Southern Lakes, ground water recharge is mostly due to rain and snow melt in the spring. Ground water comes to the surface in streams, lakes and wetlands. Water levels in Tagish River can change quickly relative to groundwater levels. This can create a complex relationship between groundwater and surface water, resulting in bank recharge.

Bank recharge occurs when water levels in a surface water body rise so quickly that the lake or river is higher than groundwater level, which, in turn, causes water to reverse and flow from the lake back into the shallow ground. In Tagish, many residents

along the river have below-ground structures: septic fields, well pits, sumps, basements, etc. Groundwater can rise above the elevation of these structures and lead to more interaction with potential contamination such as garden fertilizer and septic fields – inputs that can pose a threat to water quality.

There is plenty of general information currently available on water quality in the greater Southern Lakes system. However, more specific information about managing water quality in the Tagish River would be beneficial (**Recommendations 2, 14,27, and 29**).

River access

Many homes front the Tagish River (**Figure 4**). Six Mile West (Tagish River Road) was the first recreational subdivision in Tagish. It contains approximately 45 houses, which were first developed in the 1960s and 1970s. There are also 26 lots to the north of Tagish Road (access via Sidney Street) with some of these lots fronting Tagish Creek.

There are three small pockets of residential development on the east side of the Tagish River. North of the Tagish Road, there are a further 12 lots. This is the location of Tagish Services and the Tagish Marina. South of the Tagish Road is a Carcross/Tagish First Nation subdivision, which has 19 homes along Chinook Road, Squanga Creek Road and Mile Creek Road. There are also 13 lots along the Tagish River accessed via Pennycook Road.

The Tagish River HPA Steering Committee heard multiple concerns from Tagish residents regarding

the shoreline, water use, and access to the Tagish River. There is a 30-metre setback from the Ordinary High Water Mark inland that is an official public waterfront reserve and should be free of any unauthorized private structures. Currently, portions of public lands below and above the Ordinary High Water Mark are blocked by lot owners' developments. Vegetation has been removed in order to put structures or gardens in place leading to erosion of the river bank. The existing public easements are overgrown and not marked. The occupation and modification of the 30-metre setback means that public access along the waterway is not available without having to cross docks, decks and developed lawns. This deters public access to the area as well as access for wildlife to move freely up and down the shoreline. This activity is likely to affect shoreline vegetation and disturb wildlife, especially during the spring bird migration (**Recommendations 17-20**).

Shoreline

There are approximately 29 docks on the north end of the river, approximately five of which are in disrepair, and seven on the south end near the mouth of the Tagish River with one floating and one private boat launch (36 in total). Of 36 docks, five have proper authorizations from the Government of Yukon. Property owners are required to obtain a water lot lease in order to construct a private dock. Many residents voiced the importance of docks to their lifestyle on the Tagish River as well as to their property value.

Despite the obvious and stated values of docks to Tagish residents, permanent and floating docks can damage fish and wildlife habitat, block access to portions of the shoreline for people and wildlife (**Figure 6**), restrict water flow, shade the bottom of the waterway, change aquatic plant growth, affect fish spawning habitat and remove vegetation that is crucial in maintaining shoreline integrity.

The Carcross/Tagish First Nation Final Agreement Schedule C Section 3.5 outlines withdrawal requirements for the Tagish River HPA under the Territorial Lands (*Yukon Act*); restricting any further authorizations of land dispositions within the Tagish River HPA boundary. An order in Council withdrawing the Tagish River HPA from disposal (O.I.C 2005/222) was approved on December 15, 2005 (**Recommendations 21-25**).



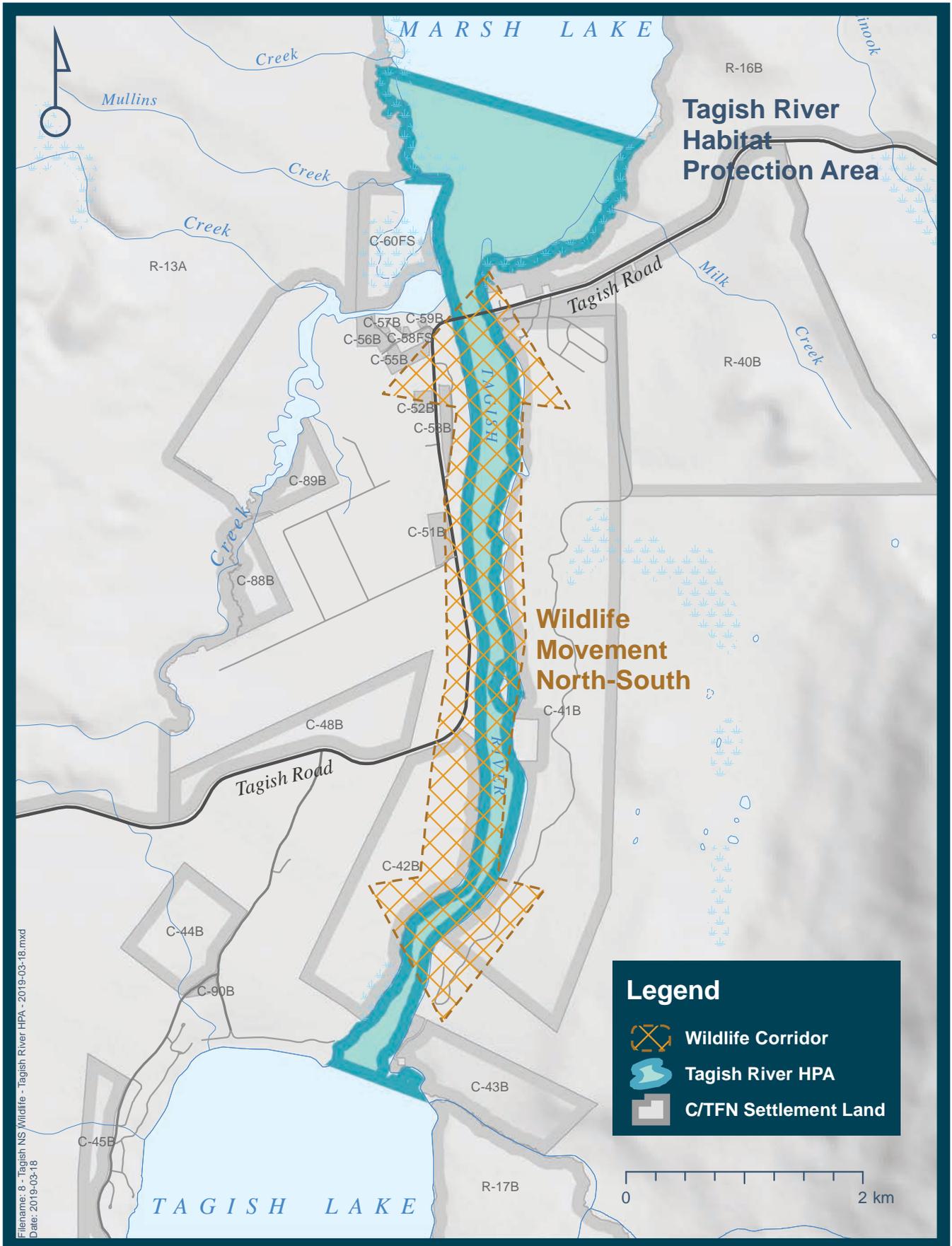
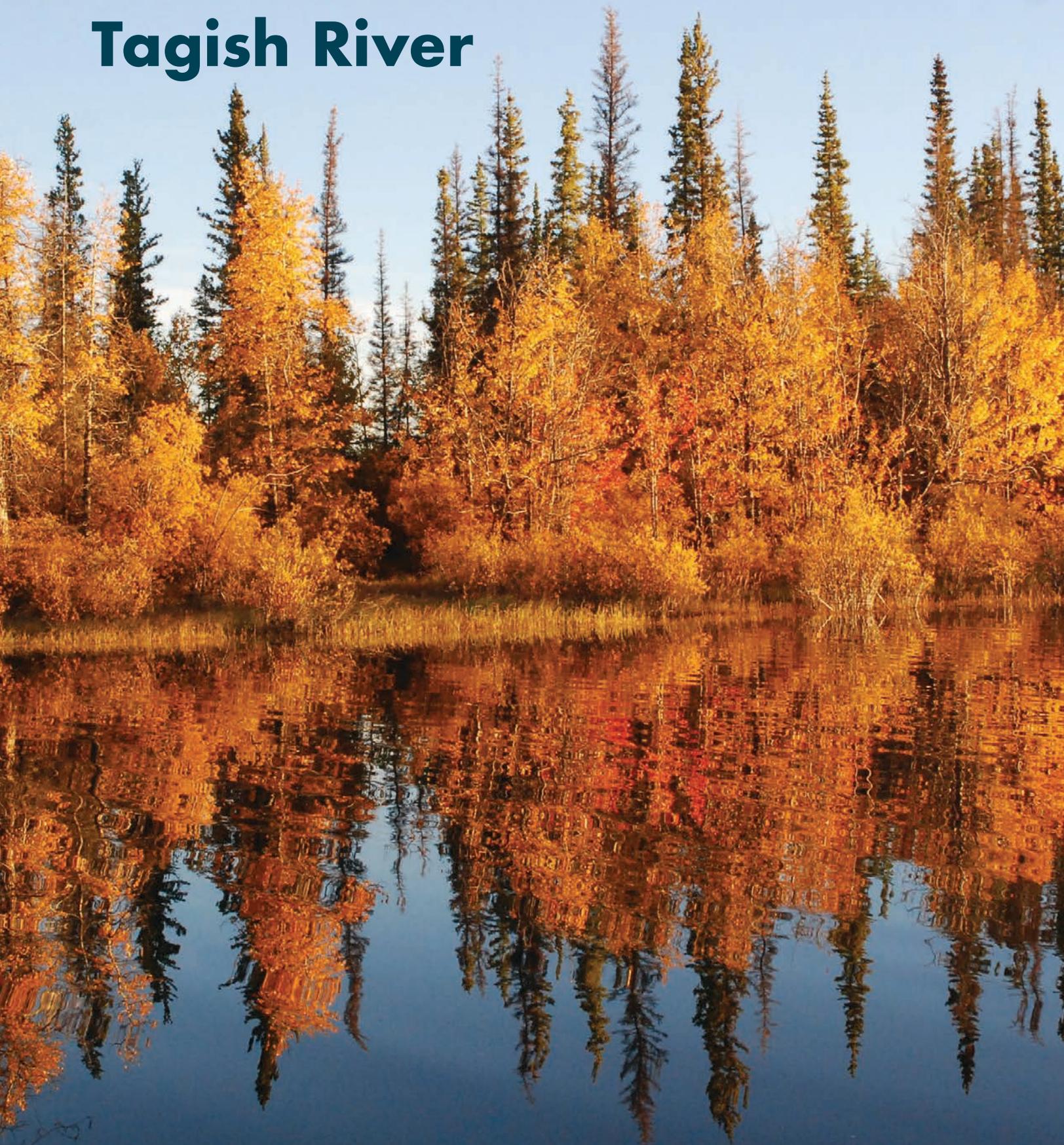


Figure 6: North-South Wildlife Movement

Fall on the Tagish River





Through the Seasons cont. by Dora Wedge

It was September, Ya ju du hen and her parents left Carcross to go to their trapline near Little Atlin Lake. They packed their things on their six dogs.

When they came to the shore of the first lake they had to cross, they found the frame of the skin boat that they had left there the spring before. They carefully sewed the skins they had with them on the frame, so it made a sturdy boat.

Father took a load of supplies across the water. Then he came back for Mother and and Ya ju du hen. They set up camp in that place for a few days. They set nets and got some fish, which they dried for dog food.

Father went out hunting. When he came back he said "I have shot three moose up the mountain. It's too far to pack them in. I guess it is best we move."

So they stored most of their things in a cache, and moved up the mountain, carrying only their blankets, tea pail, and a few other supplies.

They stayed very busy cutting all the meat up and drying it on racks.

Then they packed it all down and stored it in the cache.

They travelled on. They just took enough food to get by, because there was not yet enough snow to use for a sleigh. They travelled for a few days, then camped for a few days.

They would camp in a tent, or in a brush camp. They carried a little stove made of two oil cans. They would set it up on two pieces of green wood set in sand.

Each place they camped, they would catch some fish and store them in a cache. Soon it began to be cold enough so that they could freeze the fish instead of drying them.

After several weeks of travelling, they arrived at Small Fish Lake where they had a cabin.

Father set out traps for wolf and coyote, lynx and mink. He stayed out over night while he was setting up the trap line.

Mother and Ya ju du hen stayed home. They set many rabbit snares close to the cabin. They set some mink and weasel traps close to camp. Every day they had to cut wood and pack water from the creek. In the evenings they would sew and Mother would tell Ya ju du hen stories.



Fall on the Tagish River is signaled by the loss of fireweed blossoms and the appearance of the aspen's muted yellow. It is a time for dreaming, for self-reflection, deeper thought and for enhanced appreciation of Elders and family. Fall is a time of maturity, awareness, perseverance and connection. It is also a time for harvest and preparation for winter, by gathering berries, meat and fish, and medicinal plants.

In Tagish, days are getting shorter, temperatures cooler and the Tagish River is becoming quiet after a busy summer. The water level in the river is at or over maximum as the gates of the Lewes River Dam close in August. With the water levels at their peak, strong southerly winds increase the possibility of natural erosion, particularly at the south end of the river.

Harvest

Subsistence hunting of waterfowl takes place at the north end of the river, at the entrance to Marsh Lake. Government of Canada is responsible for issuing permits and regulating licensed hunting of migratory game birds, including possession and harvest limits and season dates. Bird species not managed by the federal government, e.g. non-migratory species such as ptarmigan and grouse, are the responsibility of the Government of Yukon under the *Wildlife Act*. While there may be some harvesting of migratory birds at the periphery of the Tagish River HPA, hunters are more likely to use the Tagish River as a transportation corridor to get to other hunting grounds.

Risks to migratory birds are relatively low during fall migration. The open water and accessible food supply mean that there are more places for birds to relocate if disturbed. However, changes to water levels in the fall may impact the quantity and quality of food to migrating waterfowl in the spring. Higher water levels can result in changes to the distribution of submerged aquatic plants along the river bed and the ability of waterfowl that feed by dabbling (versus diving) such as swans (**Recommendation 4**).



Moose are now entering the rut and begin to increase their movements. Hunters are moving out on the land with some using the Tagish River to access Tagish Lake. Their vehicles and trailers often stay in the day-use area for extended periods. Hunting within the Tagish River HPA is largely restricted by the *Wildlife Act*, which prohibits discharging a firearm within one kilometre of a residence (unless permission is granted) and licensed hunters require a permit to hunt moose in the area.

Carcross/Tagish First Nation people maintain a connection to the moose harvest that has been valued for generations. Moose continue to have a unique place in Carcross/Tagish traditions and culture. Traditional Knowledge teaches us to respect the wildlife that we hunt and to use all parts of the animal. Moose provide an important source of meat, while hides are used for shelter and clothing.

Depending on the success of the berry crop, bear activity can increase in the fall along the river. Bears may be attracted to berries in local gardens if they are unable to find enough occurring naturally. At this time, much like in the summer, bears are focusing on fattening up for their winter hibernation.

Winter on the Tagish River



Through the Seasons cont. by Dora Wedge

Now it was November, and the snow started to fall heavily. Father got out the two big dog sleighs and the harness which has been stored in the cabin at Whitefish Lake.

When there was more snow, Ya ju du hen's older brother N'ho came from Carcross with his sleigh and three dogs. He brought lots of things from the trading post at Tagish: dried potatoes and onions, dried milk, beans, flour, cornmeal and rice. And he had picked up moose meat and fish from the caches along the way.

Then N'ho unrolled his bedroll. Safe inside, where he had put them to keep from freezing, were a can of peaches, a package of cookies, and six oranges. What a treat they were!

Father and big brother, N'ho loaded the three sleighs. There was lots of snow now. They all moved to the main camp at the place called "Between the Snow."

The first thing father did was cut lots of wood. This cabin was larger and had a big stove, so much wood was needed.

Then he set out his traps, and N'ho set out his own, too. Mother and Ya ju du hen set out rabbit snares close to camp.

At this camp, Father and N'ho ran their trap lines every four days. When they came back they would skin and stretch the many furs they trapped.

Mother and Ya ju du hen were very busy, too. Each day, after breakfast, they would go around on their snowshoes and check all the rabbit snares. Then they had to saw the wood Father had cut, and pack water. Mother cleaned the moosehides, soaked them in brainwater, and put them out in the cold to freeze. She sewed a beautiful blanket from gopher skins. Father was glad to have the gopher-skin blanket to sleep in when he went round his trap lines.

Soon it was March. Now it was time to trap rats. Mother and Ya ju du hen put about 50 traps in the rat houses on a lake nearby. Now every morning they had to get up about five o'clock because there was so much to do. After breakfast they visited the rat traps. The first day they went on snowshoes to make a trail, but after that they took the dogsled.

They got 20 or 30 rats a day. When they came home, they skinned them. Then late in the afternoon, they ran the traps again. It would be late in the evening before all the rats were skinned. This meat of the rats was fed to dogs.

Sometimes Father or N'ho would help with the rat traps, but most of the time they were out on the trap lines.

One time Father stayed at the cabin at Small Fish Lake. When he got up in the morning, he lit a fire and then went to check the mink traps that Ya ju du hen and her Mother had set close to the cabin.

While he was at the traps, he heard an explosion. He hurried back, and saw that the cabin was burning! The whole inside was full of flames. His rifle, tent, and some valuable furs were all burned up – and the new gopher-skin blanket, too!

When he came back that evening, Ya ju da hen could see something was wrong because the sleigh was empty. N'ho had supper all ready for Father when he got in, but he felt so bad about the burned-up cabin he couldn't eat any of it.

Winter is characterized by silence. Snow and ice dominate the landscape and most birds have migrated south. In Tagish, activity slows as many non-year-round residents shutter their cabins. Winter is a time for survival, trapping, spending time with family and storytelling.

Birds

In winter, the Tagish River remains important for overwintering resident birds like Gray Jays, Redpolls and Chickadees. Resident birds rely primarily on cones and seeds for food and some are frequent visitors at bird feeders. Relatively few, if any, waterfowl or waterbirds overwinter on the river.

A Specific risk for resident birds include:

- window strikes at bird feeders, deathly injuries from cats and dogs and general winter mortality.

The transition to winter to spring is a long, slow one, beginning, at least in spirit, with the lengthening days of late January and February. Owls, Gray Jay and other permanent resident birds start to pair off and nest as early as February and March. We begin to feel the warmth of the sun and our eyes turn skyward, looking for the first of the migrating swans.

Wildlife

While winter winds howl, a family of beaver live snugly in the dark of their lodge. The frozen mud and sticks of the lodge make them largely impervious to predators. They leave the lodge only to make routine ventures out to reach their food stores of aspen, alder and willow branches, which are cached nearby.

Ice forms from the shore, and as the water level drops, an open space forms under the ice. In this space, mergansers and otter swim and feed all winter long, their activities often hidden from view. The river rarely freezes completely, but in times of deep cold it may be largely ice-covered.

Warm weather or strong winds will often cause leads of open water to form, particularly near the Tagish Bridge and Dickson Island. As a result, the Tagish River can be dangerous to traverse during winter for people and large animals. Moose and caribou instead opt for the thicker ice of nearby lakes. During winter, much of the available surface water is trapped in ice. Winter flows are fed by groundwater inputs and larger tributaries.

Carcross caribou migrate from their summer alpine habitat down to the coniferous forests of the valleys for the winter due to deep snow and lack of food at high elevations. Carcross caribou's winter range is generally occupied from early December to late April, and is typically characterized by open pine forest with lichen ground cover, their primary winter food source.

Almost all of the herd's winter range is in Yukon, and the entire Tagish River HPA falls within it. Through the winter months, groups of caribou are frequently observed along the Tagish Road, moving through the Taku River subdivision as well as on the north end of Tagish Lake and the south end of Marsh Lake, not far from the HPA.

Caribou are susceptible to disturbances associated with human activity and require large tracts of intact habitat to access, and move between, winter feeding areas. They will feed among the trees and then move out into the open to rest and ruminate where they can watch for predators.



The Circle of Life by George Paulin

Red stands for blood.

Blood is life.

The Blood of the Caribou
is part of the circle of life.

If this circle is broken
and we let the caribou die,
all that will be left will be the antlers.

The black antlers of death.
And only the spirit of the caribou
will be left to wander our lands.



In winter, moose may use the forest cover along the Tagish River as refuge from deep snow and also for thermal cover amongst the large trees. Willows, which grow abundantly along the river, are their primary source of food during the winter months. Local residents have reported seeing multiple moose near their yards, likely taking advantage of local food sources.

At this time, bears will no longer be a frequent sight in the Tagish River HPA, as they will be hidden away, hibernating in their dens.

Trappers maintain their traplines, collecting a variety of furbearers who in the area. Trapping has been and continues to be an important practice for both First Nation and non-First Nation trappers in the Southern Lakes region. The Tagish River is valuable habitat for furbearing species, specifically semi-aquatic ones such as otter, beaver, muskrat and mink. Other furbearers that are found within the Tagish River HPA are marten, wolverine, coyote, fox, fisher, ermine and lynx. Disturbance to furbearers, especially those that are residents within the Tagish River HPA, may be associated with motorized boats, off-road vehicles, people,

shoreline development, unleashed dogs and people taking photos. The Tagish River furbearer population is at risk of decreasing due to these disturbances (**Recommendations 3, 4, 17, 18, 19 and 24**).



Draft management recommendations

Revitalization and enhancement of Carcross/Tagish First Nation culture

1. Create ceremony around seasonal transitions to help develop new or re-establish relationships to the Tagish River HPA.
2. Ensure that communication materials for the Tagish River HPA will be made available in Tagish and Tlingit languages.
3. Use and incorporate traditional Tagish and Tlingit place names and ceremony in communication materials and at events.
4. Continue to recognize and enable the Indigenous right to practice and revitalize culture, traditions and customs. This includes the right to use traditional harvesting techniques and practices within the Tagish River HPA.
5. Develop and distribute educational/outreach material related to traditional heritage values as well as the legal obligations associated with finding and reporting artifacts.

Recreational users

6. Communicate the impacts of climate change to Tagish River HPA users to enhance general knowledge and understanding.
7. Establish a wildlife viewing area, including educational signage and outreach materials on the importance of reducing disturbance to birds along

the shoreline, for Carcross/Tagish First Nation traditional practices, boaters, off-road vehicle users, hikers, people taking photos, etc.

8. Develop and distribute educational/outreach materials (Appendix C) on respectful interactions with the river, other river users, and wildlife. This may include keeping distance from wildlife, keeping noise levels down, and keeping dogs on leashes.
9. Reduce or eliminate low flying aircraft use (including drones) in the Tagish River HPA during key life stages for migratory birds. This can be achieved by educating aircraft operators to avoid the Tagish HPA during specific times of the year. Evaluate the need to establish a controlled airspace over the Tagish River HPA during key life stages for migratory birds.
10. Create and distribute educational or outreach materials on invasive species and how to avoid introducing them into the Tagish River HPA (Appendix C).

Fishing

11. Eliminate the use of lead-based materials (lead sinkers/shot) within the Tagish River HPA to reduce contaminate exposure to fish and birds.
12. Educate anglers using the Tagish Bridge about their potential impacts on the lake trout population, and the reasoning behind current regulations.
13. Encourage anglers to target whitefish and other fish species as an alternative to lake trout to reduce fishing pressure on the lake trout population.

Boating

14. Develop and share educational and/or outreach tools on best management practices for using fuel near waterbodies (Appendix C).
15. Develop and share educational and/or outreach tools on boat speed and wake impacts on wildlife, habitat and shoreline erosion.
16. Gate the boat launches within the HPA in order to restrict boat access during critical spring staging periods. Closure dates may vary annually based on ice conditions and other factors.
17. Encourage the development and/or use of boat launches outside the Tagish River HPA for access to Tagish and Marsh Lakes in order to decrease boat traffic.
18. Educate boaters on the need to reduce boat speeds due to the impacts on fish and wildlife habitat and the potential to increase bank erosion. Evaluate the need to initiate the process to establish a speed limit for motorized boats during critical life stages to reduce disturbances to wildlife and habitat and to minimize erosion related to boat wake.

Off-road vehicle users

19. Investigate tools to prohibit shoreline use by off-road vehicles and snow machines during spring to decrease disturbance to birds and other wildlife.
20. Develop a multi-use trail plan that directs off-road vehicles away from the shoreline to relieve pressure on the Tagish River HPA.

Shoreline development and use

21. Minimize disturbance and development along the entire Tagish River shoreline to accommodate wildlife movement and to maintain nesting habitat, shading and shoreline stability.
22. Reduce docks, other shoreline structures and the cumulative impact of shoreline development. Reducing these structures on the Tagish River HPA would facilitate human and wildlife access and movement along the river.
23. Develop and distribute educational/outreach information on existing development restrictions within the Tagish River HPA and adjacent waterfront reserve.
24. Encourage the dialogue around the Tagish River HPA and adjacent lands as a wildlife corridor for east west movement.
25. Update or create best management practices for development activities to effectively address bird conservation needs within the Tagish River HPA, e.g. bridge maintenance, habitat enhancement, FireSmart and fuel abatement programs.

Stewardship, research and monitoring

26. Determine key research and monitoring questions within the Tagish River HPA to be addressed by the parties, researchers or industry. These studies will involve local input at all stages and will incorporate local and Traditional Knowledge.



27. Establish an environmental monitoring and reporting program, enabling the collection and sharing of scientific data, Traditional Knowledge and local knowledge.
28. Review and evaluate the current and past water data collection regimes and determine information needs and gaps and take steps to fill these gaps.
29. Incorporate climate change adaptation in the development and delivery of local programs and projects at a local scale. Report on key indicators of climate change in the Tagish River HPA.
30. Collect inventory information on species of interest including species at risk in the Tagish River HPA.
31. Monitor fish populations' health and harvest sustainability within the Tagish River HPA as part of the interconnected Southern Lakes system.
32. Maintain or enhance the Tagish River as a spawning, rearing and over-wintering habitat, and as a migration corridor for fish populations.
33. Assess the feasibility and need for a salmon recovery project in the Tagish River HPA.

Implementation

Through implementation of this management plan, the intent is that the Tagish River will continue to have a healthy ecosystem and wildlife populations, while providing clarity and certainty to land and water users in the area. To assist in the plan implementation, the three parties will create a committee to oversee and collaborate on the implementation of the recommendations described above. In developing the recommendations, the Steering Committee ensured there is reasonable integration within existing programs and activities of the parties. Costs associated with the plan implementation will be shared as resources allow, and in accordance with the three governments mandates. The Tagish River HPA Steering Committee recognized the interconnectedness of the river and surrounding land and have considered the need to have a coordinated approach when working on implementation of the management recommendations, specifically with the Tagish Local Area Plan.

1. As described in Chapter 10, Schedule C, Section 8.0 of the Carcross/Tagish First Nation Final Agreement, the parties shall make their best efforts to implement the recommendations of this management plan. Review of the management plan will take place no later than five years after its initial approval and at least every 10 years after the first review.
2. The Steering Committee recommends an implementation committee be formally established and comprised of representatives of Carcross/Tagish First Nation, the Government of Yukon, the Government of Canada, the Carcross/Tagish Renewable Resources Council, and the Tagish Local Advisory Council. and other local and/or regional involvement. The implementation committee will be established upon

approval of the Tagish River HPA management plan to monitor, review and report to the parties on the management plan's implementation progress. A review of the implementation committee will be conducted at the first review of the approved management plan.

3. The parties will investigate collaborative legislative and/or regulatory approaches to manage the Tagish River HPA.
4. The parties will utilize existing legislative and/or regulatory approaches to implement recommendations of this plan.
5. The objectives and management measures of this management plan should be considered in all appropriate review processes of land- and water based disturbances outside the boundaries that may influence the Tagish River HPA.
6. The parties will collaborate and coordinate on all projects, where applicable, within the Tagish River HPA and include the Carcross/Tagish Renewable Resources Council and Tagish Local Advisory Council.
7. The parties will work together to revitalize and enhance Carcross/Tagish First Nation culture as it relates to the Tagish River HPA.

Review

Under Chapter 10, Schedule C, section 8.0 of the *Carcross/Tagish First Nation Final Agreement*, the Carcross/Tagish First Nation, the Government of Yukon and the Government of Canada are required to jointly review the approved management plan no later than five years after its initial approval and at least every 10 years after the first review. Review of the approved management plan will include a process for public consultation.

Any party may request a special plan review at any time to respond to unforeseen circumstances or changing conditions that may warrant a revision to the management plan. Any such changes require agreement from the Carcross/Tagish First Nation, the Government of Yukon and the Government of Canada.



Appendix A

Carcross/Tagish First Nation Final Agreement, Chapter 10, Schedule C

1.0 Definitions

1.1 In this schedule, the following definitions shall apply.

“Approved Management Plan” means the management plan in respect of which a consensus has been reached under 6.2 or decided by the Minister under 6.3 of this schedule.

“Area” means the area shown as Tagish River Habitat Protection Area on Map Sheet Tagish River Habitat Protection Area in Appendix B - Maps, which forms a separate volume to this Agreement.

“Board” means the Water Board established for the Yukon pursuant to Laws of General Application.

“Forest Resources” has the same meaning as in Chapter 17 - Forest Resources.

“Habitat Protection Area” means the Tagish River Habitat Protection Area established by the Yukon pursuant to the *Wildlife Act*, R.S.Y. 2002, c. 229, in respect of a portion of the Area, in accordance with this schedule.

“YEC” means the Yukon Energy Corporation and its successors and assigns.

1.2 In this schedule, “mines and minerals” and the “right to work” the mines and minerals shall have their meanings according to Laws of General Application and not as defined in Chapter 1 - Definitions.

2.0 Objectives

2.1 The objectives of this schedule are as follows:

2.1.1 to establish a habitat protection area in the Tagish River area;

2.1.2 to conserve nationally and locally important Fish and Wildlife and Fish and Wildlife habitat in the Habitat Protection Area for the benefit of all people;

2.1.3 to recognize the traditional use of the Area by the Carcross/Tagish First Nation;

2.1.4 to recognize the current use of the Area by the Carcross/Tagish First Nation, Carcross/Tagish People and other Yukon residents;

2.1.5 to conserve the full diversity of Fish and Wildlife populations and their habitats from activities that could reduce the capability of the Area to support Fish and Wildlife;

2.1.6 to recognize and honour the history, heritage and culture of the Carcross/Tagish First Nation in the Area through the establishment and operation of the Habitat Protection Area;

2.1.7 to encourage public awareness, appreciation and enjoyment for the natural resources of the Habitat Protection Area;

2.1.8 to recognise the Habitat Protection Area as a multi-use area including uses for recreation and for the storage, use and management of water for hydro electric production for the benefit of all Yukon people;

2.1.9 to provide a process to develop a management plan for the Habitat Protection Area;

2.1.10 to provide economic opportunities to the Carcross/Tagish First Nation and People to participate in the development, operation and management of the Habitat Protection Area in the manner set out in this schedule.

3.0 Establishment

3.1 As soon as practicable after the Effective Date, if Canada has not already done so, Canada shall transfer to the Commissioner of the Yukon the administration and control of the Crown Land within the Area, excluding the mines and minerals and the right to work the mines and minerals, in, on or under the Crown Land.

- 3.2 Except as provided in 3.3, as soon as practicable after the Effective Date and following the transfer referred to in 3.1, the Yukon shall designate the Area as a habitat protection area pursuant to the *Wildlife Act*, R.S.Y. 2002, c. 229, to be known as the Tagish River Habitat Protection Area.
- 3.3 The Habitat Protection Area shall not include:
- 3.3.1 the mines and minerals, in, on or under the Area and the right to work the mines and minerals;
- 3.3.2 any land which is Settlement Land as of the Effective Date of this Agreement;
- 3.3.3 any land in respect of which a title is registered in the Land Titles Office as of the Effective Date of this Agreement to a Person who is not a party to this Agreement;
- 3.3.4 any Crown Land that is subject to an agreement for sale or a lease containing an option to purchase, issued by Government on or before the Effective Date of this Agreement;
- 3.3.5 the unnamed island in Tagish River as shown on Map Sheet Tagish River Habitat Protection Area in Appendix B - Maps, which forms a separate volume to this Agreement.
- 3.4 The designation as a habitat protection area shall not be removed from any part of the Habitat Protection Area without the agreement of the Yukon, the Carcross/Tagish First Nation and Canada.
- 3.5 Subject to 3.8 and 3.9, Government shall, no later than the Effective Date:
- 3.5.1 prohibit entry on the Area for the purpose of locating, prospecting or mining under the *Quartz Mining Act*, S.Y. 2003, c. 14, and the *Placer Mining Act*, S.Y. 2003, c. 13; and
- 3.5.2 withdraw the mines and minerals, in, on or under the Area from disposal under the *Territorial Lands (Yukon) Act*, S.Y. 2003, c. 17.
- 3.6 Subject to 3.8 and 3.9, the Yukon shall, no later than the Effective Date, withdraw the Area from disposition under the *Oil and Gas Act*, R.S.Y. 2002, c. 162.
- 3.7 Subject to 3.8 and 3.9, no one may explore for coal in, on or under the Area.
- 3.8 For greater certainty, the provisions of 3.5, 3.6 and 3.7 shall not apply in respect of:
- 3.8.1 mineral claims and leases recorded or continued under the *Quartz Mining Act*, S.Y. 2003, c. 14 and placer mining claims and leases to prospect recorded or continued under the *Placer Mining Act*, S.Y. 2003, c. 13, existing on the Effective Date;
- 3.8.2 oil and gas dispositions under the *Oil and Gas Act*, R.S.Y. 2002, c. 162 existing on the Effective Date, which for greater certainty, includes federal dispositions;
- 3.8.3 rights granted or continued under section 6 of the *Territorial Lands (Yukon) Act*, S.Y. 2003, c. 17, existing on the Effective Date; and
- 3.8.4 any successor or replacement rights and any new leases, licenses, permits or other rights which may be granted in respect of an interest described in 3.8.1, 3.8.2 or 3.8.3.
- 3.9 The provisions of 3.5, 3.6 and 3.7 shall not prohibit the granting of rights to mines and minerals underlying the Area which may be accessed directionally from a location outside the Area, and the right to work such mines and minerals, provided that the granting of such rights and the working of those rights do not require access to the surface of the Area or would result in a reasonable likelihood of disturbing the surface of the Area.

4.0 Steering Committee

- 4.1 A steering committee (the "Steering Committee") shall be established as soon as practicable after the Effective Date to prepare and recommend a management plan for the Habitat Protection Area.

4.2 The Steering Committee shall be comprised of six members, of whom three shall be designated by the Carcross/Tagish First Nation, two shall be designated by the Yukon and one shall be designated by Canada.

4.3 Members of the Steering Committee shall have knowledge and expertise with respect to management of habitat protection areas and shall be delegates of the parties who designated them.

4.4 The Steering Committee may make its own operating procedures and shall, to the greatest extent possible, work on a consensus basis.

5.0 Management Plan

5.1 The Steering Committee shall endeavour to recommend a management plan to the Yukon, the Carcross/Tagish First Nation and Canada within 24 months of the establishment of the Steering Committee.

5.2 The management plan shall be consistent with the objectives set out in 2.1.2 to 2.1.10 of this schedule and with the *Wildlife Act*, R.S.Y. 2002, c. 229.

5.3 The Steering Committee shall consider and the management plan may address all matters pertaining to the management of the Habitat Protection Area including:

5.3.1 Fish and Wildlife management and protection;

5.3.2 habitat management and protection;

5.3.3 land use;

5.3.4 recreational use;

5.3.5 access to and use of the Habitat Protection Area for commercial purposes;

5.3.6 scientific research;

5.3.7 traditional knowledge, customs and cultures of Carcross/Tagish People in connection with the Area;

5.3.8 the role and views of Carcross/Tagish First Nation elders in the development of the management plan;

5.3.9 the traditional use of the Area by the Carcross/Tagish First Nation and Carcross/Tagish People;

5.3.10 the past and current use of the Area by the Carcross/Tagish First Nation, Carcross/Tagish People and other Yukon residents;

5.3.11 measures to enhance public awareness and appreciation of the Habitat Protection Area; and such other matters as Government and the Carcross/Tagish First Nation may jointly request the Steering Committee to consider.

5.4 The preparation of the management plan shall include a process for public consultation.

5.5 Prior to approval of the management plan, the Steering Committee may refer the management plan to the Carcross/Tagish Renewable Resources Council for their review and recommendations.

5.6 In preparing a management plan to recommend pursuant to 5.1, if the members of the Steering Committee are unable to reach a consensus as to the matters to be included in a management plan, any member of the Steering Committee may, upon direction from the body that designated them, refer the matter to dispute resolution under 26.4.0.

5.7 The Steering Committee shall forward a proposed management plan to the Yukon, the Carcross/Tagish First Nation and Canada indicating what matters, if any, remain outstanding.

6.0 Review and Approval of the Management Plan

- 6.1 Within 90 days of receipt of the management plan from the Steering Committee, the Yukon, the Carcross/Tagish First Nation and Canada shall jointly review the provisions therein and any outstanding matters.
- 6.2 The Yukon, the Carcross/Tagish First Nation and Canada shall make reasonable efforts to reach a consensus as to the provisions to be included in the management plan.
- 6.3 If the Yukon, the Carcross/Tagish First Nation and Canada fail to reach a consensus under 6.2, within 180 days of receipt of the management plan from the Steering Committee, the Minister may accept, vary or set aside the provisions set out in the management plan from the Steering Committee.
- 6.4 The decision of the Minister under 6.3 as to the provisions to be included in the Approved Management Plan shall be forwarded to the Carcross/Tagish First Nation and Canada in writing.

7.0 Implementation of the Approved Management Plan

- 7.1 The Yukon shall manage the Habitat Protection Area in accordance with the Approved Management Plan and the *Wildlife Act*, R.S.Y. 2002, c. 229.
- 7.2 Prior to the implementation of the Approved Management Plan, the Yukon shall manage the Habitat Protection Area in accordance with the *Wildlife Act*, R.S.Y. 2002, c. 229 and to the extent practicable, in a manner consistent with the objectives set out at 2.1.2 to 2.1.10 inclusive of this schedule.
- 7.3 Government, the Fish and Wildlife Management Board and the Carcross/Tagish Renewable Resources Council shall make best efforts to coordinate the management of Fish and Wildlife populations which cross the boundary of the

Habitat Protection Area.

- 7.4 Government shall manage the mines and minerals in, on or under the Area and the right to work the mines and minerals in accordance with Laws of General Application.
- 7.5 In managing the mines and minerals in, on or under the Area and the right to work the mines and minerals in accordance with Laws of General Application, Government shall, to the extent practicable, take into account the objectives set out in 2.1.2 to 2.1.10 inclusive of this schedule.

8.0 Review and Amendment of the Approved Management Plan

- 8.1 Unless they otherwise agree, the Yukon, the Carcross/Tagish First Nation and Canada shall review the Approved Management Plan no later than five years after its initial approval and at least every 10 years after the first review.
- 8.2 Review of the Approved Management Plan under 8.1 shall include a process for public consultation.
- 8.3 Recommendations for any proposed amendments arising from the reviews under 8.1 shall be forwarded to the Minister as soon as practicable following each review.
- 8.4 The Yukon, the Carcross/Tagish First Nation and Canada shall make reasonable efforts in the review under 8.1 to reach consensus as to any action to be taken as a result of the review of the Approved Management Plan.
- 8.5 The Minister shall determine what action, if any, shall result from the review of the Approved Management Plan and shall advise the Carcross/Tagish First Nation and Canada of any decision in writing.
- 8.6 Government and the Carcross/Tagish First Nation shall consider and may develop mechanisms or enter into agreements to facilitate co-operative implementation and monitoring of the Approved Management Plan.

9.0 Fish and Wildlife

9.1 For greater certainty, Carcross/Tagish People have the right to harvest Fish and Wildlife within their Traditional Territory within the Habitat Protection Area in accordance with Chapter 16 - Fish and Wildlife.

10.0 Forest Resources

10.1 The right of Carcross/Tagish People to harvest Forest Resources within their Traditional Territory within the Habitat Protection Area shall be pursuant to Chapter 17 - Forest Resources, but the rights pursuant to 17.3.1.2 shall be subject to the provisions of the Approved Management Plan.

11.0 Heritage

11.1 Tagish and Tlingit shall be included, where practicable, in any interpretive displays and signs regarding the history and culture of Carcross/Tagish People that may be erected in, or related to, the Habitat Protection Area.

11.2 When considering the naming or renaming of places or features in the Habitat Protection Area, the responsible agency shall Consult with the Carcross/Tagish First Nation.

11.3 Nothing in this schedule or the Approved Management Plan shall affect the ownership of Heritage Resources as provided in 13.3.0 of this Agreement.

12.0 Economic Opportunities

12.1 Government shall provide written notice to the Carcross/Tagish First Nation of any public tender for contracts associated with establishment of the Habitat Protection Area, construction of the Habitat Protection Area facilities or operation and maintenance of the Habitat Protection Area.

12.2 Government shall include the Carcross/Tagish First Nation in any invitational tender for contracts associated with establishment of the Habitat Protection Area, construction of the

Habitat Protection Area facilities or operation and maintenance of the Habitat Protection Area.

12.3 The Carcross/Tagish First Nation shall have the first opportunity to accept any contract offered by Government, other than by public or invitational tender, associated with establishment of the Habitat Protection Area, construction of the Habitat Protection Area facilities or operation and maintenance of the Habitat Protection Area upon the same terms and conditions as would be offered to others. A first opportunity shall be offered in the following manner:

12.3.1 Government shall give notice in writing to the Carcross/Tagish First Nation specifying the terms and conditions of any such contract;

12.3.2 the Carcross/Tagish First Nation may exercise the first opportunity referred to in 12.3 by advising Government in writing, within 45 days of receipt of the notice referred to in 12.3.1, that it will be accepting such contract; and

12.3.3 if the Carcross/Tagish First Nation fails to advise Government within the time and in the manner specified in 12.3.2, it shall be deemed to have given notice that it will not be exercising the opportunity set out in 12.3.

12.4 Any failure to provide written notice pursuant to 12.1 shall not affect the public tender process or the contract awards resulting therefrom.

12.5 Any failure to include the Carcross/Tagish First Nation in any invitational tender for contracts pursuant to 12.2 shall not affect the invitational tender process or the contract awards resulting therefrom.

12.6 Any failure to provide a first opportunity pursuant to 12.3 shall not affect any contract entered into associated with establishment of the Habitat Protection Area, construction

of the Habitat Protection Area facilities or operation and maintenance of the Habitat Protection Area.

- 12.7 Government shall include a criterion for employment of Carcross/Tagish People or engagement of Carcross/Tagish Firms in any contract opportunities associated with establishment of the Habitat Protection Area, construction of the Habitat Protection Area facilities or operation and maintenance of the Habitat Protection Area.
- 12.8 Nothing in 12.7 shall be construed to mean that a criterion for employment of Carcross/Tagish People or engagement of Carcross/Tagish Firms shall be the determining criterion in awarding any contract.
- 12.9 A failure to include a criterion for employment of Carcross/Tagish People or engagement of Carcross/Tagish Firms pursuant to 12.7 shall not affect any contract entered into associated with establishment of the Habitat Protection Area, construction of the Habitat Protection Area facilities or operation and maintenance of the Habitat Protection Area.

13.0 Development Assessment and Land Use Planning

- 13.1 In carrying out their functions under Chapter 12 - Development Assessment, the Yukon Development Assessment Board and a Designated Office shall consider the Approved Management Plan.
- 13.2 In developing a land use plan which includes all or part of the Habitat Protection Area, a Regional Land Use Planning Commission shall consider the Approved Management Plan.

14.0 Hydro-Electric Production

- 14.1 The establishment of the Habitat Protection Area is not intended to create a priority among the interests or uses referenced in the objectives set out in 2.0.
- 14.2 The establishment of the Habitat Protection

Area and the development of an Approved Management Plan, and any amendment thereto, shall not affect the jurisdiction of the Board.

- 14.3 Notwithstanding this schedule, management of the Habitat Protection Area shall not affect the rights, privileges and obligations of YEC with respect to the storage, use and management of the water in the Area for hydro-electric production pursuant to;
- 14.3.1 Water License HY99-010;
- 14.3.2 the *Northern Canada Power Commission Yukon Assets Disposal Authorization Act, S.C. 1987, c. 9* and agreement related thereto; and
- 14.3.3 any future licenses and authorizations issued to YEC in relation to waters in the Area, including a right to flood to the extent necessary and authorized by the Board.

Appendix B

Tagish River Habitat Protection Area Steering Committee Guiding Principles

How we will work together July 2015

The Tagish River Habitat Protection Area Steering Committee was established in April 2015. The following Guiding Principles document outlines how the Steering Committee will function to accomplish the objectives laid out in Section 2.1, Schedule C of Chapter 13 of the Carcross/Tagish First Nation Final Agreement. The Steering Committee will also respect and consider the Carcross/Tagish First Nation Elders' Statement throughout the planning process.

The objectives, as laid out in Section 2.0 of Schedule C of the Carcross/Tagish First Nation Final Agreement, are:

- 2.1.1 to establish a habitat protection area in the Tagish River Area;
- 2.1.2 to conserve nationally and locally important Fish and Wildlife and Fish and Wildlife habitat in the Habitat Protection Area for the benefit of all people;
- 2.1.3 to recognize the traditional use of the Area by the Carcross/Tagish First Nation;
- 2.1.4 to recognize the current use of the Area by the Carcross/Tagish First Nation, Carcross/Tagish People and other Yukon residents;
- 2.1.5 to conserve the full diversity of Fish and Wildlife populations and their habitats from activities that could reduce the capability of the area to support Fish and Wildlife;
- 2.1.6 to recognize and honour the history, heritage and culture of the Carcross/Tagish First Nation in the area through the establishment and operation of the Habitat Protection area;

- 2.1.7 to encourage public awareness, appreciation and enjoyment for the natural resources of the Habitat Protection Area;
- 2.1.8 to recognize the Habitat Protection Area as a multi-use area including uses for recreation and for the storage, use and management of water for hydroelectric production for the benefit of all Yukon people;
- 2.1.9 to provide a process to develop a management plan for the Habitat Protection Area;
- 2.1.10 to provide economic opportunities to the Carcross/Tagish First Nation and People to participate in the development, operation and management of the Habitat Protection Area in the manner set out in this schedule.

Consensus Process

The Tagish River Habitat Protection Area Steering Committee will adopt the following consensus process principles. See attached Table 1 for more details.

1. **Purpose Driven** – Steering Committee members and other effected stakeholders need a reason to participate.
2. **Inclusive not exclusive** – All parties with a significant interest in the planning process for Tagish River HPA may be involved in the process.
3. **Voluntary Participation** – Members as well as observers and invitees will participate voluntarily.
4. **Self-Design** – The Steering Committee Members will design this process.
5. **Flexibility** – The Steering Committee will be flexible in its approach to allow for inclusiveness throughout the management planning process.
6. **Equal Opportunity** – Steering Committee members will have equal access to relevant information and the opportunity to participate effectively

throughout the management planning process.

7. **Respect for Diverse Interests** – Steering Committee members will accept of the diverse values, interests and knowledge of the parties involved in the consensus process.
8. **Accountability** – The parties are accountable both to their constituencies, and to the process that is agreed to.
9. **Time Limits** – Realistic deadlines are necessary throughout the process.
10. **Implementation** – Commitment to implementation and effective monitoring are essential part of this planning process.
11. **Risk Framework** – Being aware of risk throughout the process is necessary.

Steering Committee Members

The responsibility of an individual Steering Committee member is to work with other members to contribute to the fulfillment of the Steering Committee objectives. To accomplish this, Steering Committee members will:

- Effectively represent the interests of their respective governments;
- Keep informed about the fish and wildlife matters of relevance to the work of the Steering Committee and the views of their respective governments on these matters;
- Participate fully in Steering Committee meetings by preparing ahead of time and attending the entire meeting.
- Steering Committee Meetings
- Meeting agendas will be developed by the Fish and Wildlife Planner and the Steering Committee Chair and will be circulated by email in advance of the meeting;
- Meeting summaries will be completed for each Steering Committee meeting and will be circulated by email following the meeting;
- Meetings will be held every second Wednesday of every month unless otherwise

agreed upon by the Steering Committee.

- Meetings will be held in Tagish, when possible.
- The Steering Committee will complete a work plan to be revised as needed.
- Steering Committee Meetings will be held as long as one Government of Yukon member, two Carcross/Tagish First Nation Citizens, and one Environment Canada member is able to attend the meeting. (Environment Canada will decide on an alternate member.)

Secretariat Support

- Secretariat support for the Steering Committee will be provided by the Fish and Wildlife Planner, Government of Yukon. Responsibilities will include:
 - Scheduling and arranging meetings;
 - Preparing materials to assist the Steering Committee to carry out their work;
 - Overseeing the production of meeting summaries, including the appropriate distribution, and required follow-up, of action items required; Responding to information requests, and developing and managing public communications for review and approval by the Steering Committee; and
 - Under the direction of the Steering Committee, drafting the management plan and other documents, and developing work plans.

Participation by other groups

- Steering Committee members may request persons with specialized information about the area or the planning process to attend meetings in an advisory capacity;
- Observers or invitees will be agreed to by the Steering Committee in advance.
- Attendance by meeting guests will be agreed to by the Steering Committee in advance.

Work Plan and Communications

- The Steering Committee will develop a work plan, identifying tasks, timelines and responsibilities. A communications strategy will be developed and reflect the annual work plan.
- Communication products will be developed and approved in a manner consistent with the policies of the participating governments.

Information Sharing

- Steering Committee members will contribute information subject to any legal requirement that the information not be disclosed.
- Traditional knowledge will be shared and respected in a manner consistent with the policies of Carcross/Tagish First Nation as identified by their Steering Committee members.

Budgets/Funding

- The Yukon government shall provide funding within approved annual budgets to support the operations of the Steering Committee.
- Other governments will provide in-kind and financial support to support the work of the committee as funds are available.
- The payment of honoraria, travel and other related expenses to their respective Steering Committee members is at the discretion of each government.

Appendix C

Ideas for Educational and Outreach Material

Interacting with the Tagish River

- Respect the river, its wildlife (including the two-legged, four-legged, winged and finned), and its habitat.
- Do everything you can to leave the water clean.
- View wildlife from a distance. Observe animals for warning signs such as displays, calls, freezing, raising the head or interruptions of actions. Is the animal doing something different in your presence than it was when you first arrived? If the answer is yes, you may be too close. Back up slowly.
- If you are photographing wildlife, use a lens that allows you to remain at a respectful distance.
- Stay clear of nests and dens. They are especially vulnerable to human disturbance.
- Ensure that any construction, land clearing, fire smarting and bridge maintenance occurs outside the general nesting period (beginning of May to the end of August). For more information see: <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html>.
- Ensure habitat along the shoreline is intact, including snags for cavity nesters.
- Use calls and whistles selectively. Calls, whistles and playback recordings interrupt an animal's daily routine.
- Limit the time of your stay. Like any good visitor, know when you have overstayed your welcome.
- Avoid surprising wildlife. Don't try to sneak up on an animal to get a closer look. A startled animal will be stressed and potentially dangerous.
- Never surround an animal with a group of people. Large animals have been known to charge if they feel cornered. Always give them a route to escape.
- Keep dogs on a leash and cats indoors. Your pets can startle, chase and even kill wildlife. If you do bring your pets, make sure to keep them on a leash at all times.
- Never feed wild animals.
- Don't litter. Animals may eat garbage or become entangled in it with unfortunate consequences. Be respectful and keep the Tagish River clean so those who come after us can enjoy it.
- Do not disturb plants, branches or bushes around dens or nests. By making a den or nest more visible to people, you also make it more visible to predators.
- Respect other viewers. If you scare animals away, you ruin everyone's viewing experience. When viewing in a group, take a look, then let the next person have a turn.
- Spread the word about appropriate interaction with the Tagish River and wildlife viewing etiquette. Teach your children about the importance of not disturbing wildlife and tell them the story of the Tagish River so that these stories will continue to be shared.
- Use off-road vehicles on designated trails only and stay off the river bed/ice/mud, especially during spring and early summer.
- Minimize disturbance to migrating waterfowl: do not boat (motorized or non-motorized) during spring migration.
- Maintain a large distance from staging swans and other waterfowl, e.g. view them from the bridge, not the shore. If the swans or birds start to react to your presence, you are probably too close. Give them their space.

Let's share this beautiful place with generations to come. Be mindful of your time and space when interacting with the Tagish River.



are abundant and delicious, and, with the right gear and a little know-how, are easy to catch.

Lake whitefish feed on small invertebrates and tiny fish. Try using bead-head flies, tiny jigs and small spinners to imitate their food sources. Tiny flies and lures can be difficult to cast on their own so use a weighted bobber such as a casting bubble to give you sufficient weight for casting. Whitefish have keen eyesight, and are shy of heavy line so use a 6-lb test monofilament or lighter.

For fly fishers, whitefish offer an excellent opportunity for sight fishing. Try using flies that imitate freshwater shrimp or chironomid larvae.



Try Whitefish!

Whitefish is an excellent alternative to lake trout. Here's why:

- With white flesh and few bones, whitefish is easy to prepare.
- They are often found in shallower water than lake trout, making them easier to locate.
- They are a very sustainable harvest.
- They are lower on the food chain than predatory fish like lake trout, which means our lakes can produce more whitefish per year than trout.
- Unlike lake trout, whitefish populations experience very little angling pressure.

Lake whitefish are common in Tagish River, and anglers are learning how to catch them. These fish

Mind your wake: reducing your impact when boating on the Tagish River

Shoreline erosion is a process that occurs along all watercourses. There are many natural causes such as waves, floods, and ice scour, but human activities such as vegetation removal or passing boats can greatly increase the rate of erosion. The extent of erosion varies, and is closely linked to, the nature of the shoreline material. Erosion in smaller channels of water with fine-grained banks like the Tagish River can be very high. Minimizing the wake from your boat is an important consideration.

Shoreline erosion has many consequences on the aquatic environment, including habitat destruction, increased sedimentation and water turbidity, as well as the release of nutrients. Shoreline erosion

can also lead to loss of land and affect waterfront properties. In Tagish, erosion can also cause the exposure of archeological sites, such as the grave site uncovered in 2018.

The size of a boat's wake depends on the hull size and shape, boat speed, distance from shore and depth of water. Naturally occurring wind-driven waves tend to have low frequency and are relatively slow moving. Unlike natural waves, boat wake travels at the speed of the boat and wake frequencies are often high. The combination of a wake's speed, height and wave frequency can make it dangerous to other boaters and damaging to shorelines, structures and wildlife habitat.

Tips to reduce your wake:

- When the bow lifts and the stern dips, the wake begins to build. Big wakes are caused by boats cruising with the bow high and the stern deep. Reduce your speed.
- Stay as far away from shore as possible.
- When coming off plane/step, pass through the transition phase smoothly, getting the boat level in displacement speed without too much delay.
- Position your passengers throughout the boat in order to reduce the time spent while in transition speed.
- Using trim tabs can greatly reduce the wake by leveling your boat at a lower speed and easier transition.
- Avoid churning up the bottom sediment.
- You are responsible for your wake. Look behind you to see and understand its impact. Adjust your speed accordingly.
- If you are using the Tagish Bridge boat launch to access Tagish Lake or Marsh Lake, consider alternative access points such as Judas Creek (Lake View Marina), Logan Road or Willow Road to minimize travel in the Tagish River.

Enjoy your time and be respectful of the land, wildlife and residents!

Fueling your boat near water

Haa daséigu a tóo yéi yatee

Our life is in the water, our breath is in the water

Coastal Tlingit Elder, David Katzeek (personal communication, 2013)

When fueling your boat, always consider the effect you may have on the environment around you.

The most important ways to minimize potentially harmful impacts are to reduce consumption of fuel and oil, and to prevent spills. Oil and gas spills are detrimental to aquatic environments. Avoid fueling your boat while in the water.



Other tips to consider when fueling near water

- Fuel slowly and carefully. Never prop open a fuel trigger on a gas pump handle or leave your vessel unattended when filling your gas tank.
- Use oil absorbent pads to catch drips while handling the fuel nozzle between the dock or your truck and the boat.
- Know how much fuel your tanks hold and only fill the tank to 90%; fuel expands as it warms up.
- Fill portable gas tanks on shore where spills are less likely to occur and are easier to clean up.
- Inspect fuel lines regularly. Replace those with dry, cracked or soft spots.
- Have your boat filled and ready to go before launching into the water.

Appendix D

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