

Our Bridge to the Future

Teslin Integrated Community
Sustainability Plan

Teslin Tlingit Council & Village of
Teslin

Contents

The Planning Process.....	3
Teslin Community Profile.....	5
Teslin Vision and Values.....	7
Teslin Goals and Measures of Success.....	8
Sustainability.....	11
Teslin Goals – “Current Reality” and “Description of Success”.....	14
Community Evaluation and Sustainability Analysis.....	22
Infrastructure Priorities.....	26
Appendices	
Appendix 1 – Teslin Shared Community Services.....	29
Appendix 2 – Community Inventory and Assessment Checklists.....	31
Appendix 3 – Village of Teslin and Teslin Tlingit Council Organization Charts.....	35

The Planning Process

In the late winter of 2006, the Village of Teslin held a community dinner and public meeting to introduce the concept of an ICSP to their residents.

Advertisements for the meeting were placed in the Yukon News on February 1, 3, 6, 10 and 13, 2006

Community Dinner/ICSP Public Meeting #1 - February 15, 2006

As a testament to the very strong relationship between the Village of Teslin (VOT) and the Teslin Tlingit Council (TTC), a decision was made to collaborate on one common plan for the whole community of Teslin. A joint planning committee made up of appointees of each local government and as well as members of the public was established.

We conducted interviews with members of the public. We also made a presentation to the school and asked Youth for their input in the plan. We conducted a review of existing planning documents to ensure previous consultative processes were considered.

Public documents reviewed:

1. *Understanding Strengths in Indigenous Communities*, April 2005
2. *Talking to the People* – Teslin Renewable Resources Council, February 2001
3. *Teslin Tlingit Community Development Plan*, November 2000
4. Teslin Official Community Plan, March 1999
5. Needs Assessment & Feasibility Study of Residential Care Facility, January 2005

Both the municipal council and the Teslin Tlingit Executive Council were involved at each step of the planning. As well, two further public meetings were held in March and September of 2007 to ensure that residents had an opportunity to express their views..

Advertisements for the meeting were placed in the Yukon News on March 14, 16, 19, 21 and 23, 2007

ICSP Public Meeting #2 - March 29, 2007

Advertisements for the meeting were placed in the Yukon News on September 28, October 1, 3, 5 and 10, 2007

ICSP Public Meeting #3 - October 10, 2007

This document contains the overarching vision, values and goals of our community. It also contains the initial sustainability analysis and priorities for the basic infrastructure that our governments provide to our citizens. We will continue planning for our other priority areas as we strive to meet the needs and expectations of the residents of Teslin while moving our community closer towards sustainability.

Teslin Community Profile

Teslin is a century-old townsite located at Mile 804 (Km. 1296) on the Alaska Highway. Home to the Nisutlin Bridge, the longest span anywhere along the highway, Teslin is a town that grew up from a trading post in the early 1900s to the small, but bustling, community of about 450 it is today.

Streets meander through Smarchville, across the highway to the newer subdivision and back again across the highway, behind the frontage buildings and into the hidden core of the community perched on the shores of Nisutlin River and Teslin Lake.

Like most Yukon communities, Teslin is home to a First Nation that has lived in the area for centuries. The Teslin Tlingit Council, or Dakh-ka Tlingit, is an inland Tlingit group that migrated through the Taku River from Alaskan Coastal areas and settled in this area. The Tlingit people relied on this area for subsistence and cultural identity long before it became a stop over for prospectors working their way North during the Klondike Gold Rush of 1898. Once the rush passed, the Hudson's Bay Co. established the Nisutlin Trading Post, and Teslin, as we know it today, was born.

In 1906 the Anglican Church opened a mission to serve the community. That early Log building is still in use as a parish hall. In 1938 the Roman Catholic Mission was opened with a resident priest. A century later, the prospectors and the fur traders are gone and the church plays a much diminished role. In their place is a community where residents and visitors benefit from modern facilities that include museums, an R.C.M.P. detachment, an elementary school, community centre, health unit, post office, motels, restaurants, and a general store.

On pace with the growth, local governance has evolved. Today, the First Nation and the rest of the community have learned to live and govern together. The Teslin Tlingit Council is a self-governing First Nation with a comprehensive Land Claim settlement, while the municipality of Teslin is one of eight local governments in the Yukon. As evidenced by this joint sustainability plan, both governments are working in unison to forge a future for the community that will ensure it remains vibrant and growing, while protecting the foundational elements of the community.

From the beginning, Teslin has been a community built on subsistence activities. Hunting and fishing still play a key role in the lives of many residents, both for recreation and sustenance. In the late summer Chinook and Chum salmon travel up the Yukon and then the Teslin Rivers to spawn. Autumn brings ducks, geese and moose. As with many rural communities, the residents rely on the surrounding landscape for wood to keep them warm in the winter and water for drinking and cooking.

Of course, modern amenities are also present in every home. The same oil heat, electricity, reliance on vehicles and modern construction that predominate in larger centres prevail in Teslin. The difference in this northern town is that those elements of life are balanced against a more traditional, sustainable lifestyle.

The modern economy is also playing a larger and larger role. Tourism is becoming one of the biggest economic engines in the community. Based predominantly around First Nation culture, highway traffic and recreational fishers and hunters, the tourism sector provides jobs and opportunities to many residents.

Government is another vital component in Teslin's economy with as many as one-third of residents employed in this sector. Between the First Nation, the municipality and territorial government, many of the people who live in Teslin also work on keeping it going through a public sector job. There are also a significant number of jobs in the health and construction sectors.

While youth often leave the community for education and employment opportunities elsewhere, there are some good facilities in the community, including a K-9 school and a local Yukon College campus. Teslin has also made efforts to improve health and fitness opportunities by providing ice and curling rinks, parks, docks, trails, baseball fields, and a skateboard park. A full time recreation programmer is on staff to maintain appropriate attention to recreational needs.

Community leadership and innovation on projects such as the use of waste heat in the curling and ice rinks shows an understanding of sustainability. Between the current amenities, Tlingit Heritage Centre, the George Johnston Museum and other local businesses, Teslin has the basic building blocks to be a sustainable community well into the future.

Teslin Vision Statement

"Teslin will be a community that provides for the long term social, cultural and economic needs of its residents while protecting and respecting the natural environment that sustains them."

Teslin Values

The community of Teslin will develop a long-term community sustainability plan based on the values of its residents. As we plan for our future, the goals we are working towards must reflect these values while moving our community towards sustainability. We recognize that individual residents have diverse personal values and goals. However we believe that the residents of Teslin share the following community values:

Respect for our neighbours, our community and ourselves.

Respect for others and ourselves allows us to succeed as individuals, while providing a supportive and unified community for all residents. We believe that we share a collective responsibility to encourage and support all members of our community in realizing their personal potential and goals in a way that allows others to do the same.

The health of our residents.

The health of all residents is an essential component of a successful and sustainable community. A physically and emotionally healthy population is the most important building block for the future of our community.

Knowledge, learning, and education.

We recognize the importance of formal and informal education and life long learning in building strong citizens and sustainable communities. Retaining traditional knowledge and acquiring new knowledge is critical to our future.

Our Tlingit heritage and culture.

The Tlingit heritage, language and culture is a vital part of the fabric of our community. It is integral to the past, present and future of Teslin and is valued by all of our community members.

The natural environment that sustains our community.

A healthy natural environment is critical to our existence. It provides the clean air, land and water that we rely upon for our very survival while supporting traditional lifestyles and providing sustainable economic opportunities and recreational activities. Teslin Lake is an especially important part of the natural environment for members of our community.

Teslin Goals

The values of our residents are directly reflected in our community goals. We recognize that different orders of government have specific roles and responsibilities, but we believe that we can achieve more by working together whenever possible, and in complimentary ways at all times. To ensure that we are successful in reaching our goals, we will use indicators, or “measures of success.” Where measures of success listed below indicate a time period of 2006 to 2016, they are based on Canada Census data. The following community goals are based on the values of our community members, and are shared by the Village of Teslin and the Teslin Tlingit Council:

A community in which all residents are able to meet their basic needs.

This goal is aligned with the Teslin community value of “*respect for our neighbours, our community, and ourselves.*”

We must ensure that all residents of Teslin are able to meet their needs. These include, but are not limited to, the most basic needs of healthy and adequate food, and safe and appropriate housing.

Measuring the ability of residents to meet their needs in the community can be difficult especially as it relates to healthy and adequate food. We can measure housing in more tangible ways:

- A decrease in the number of dwellings requiring major repair - as a % of total occupied private dwellings.
- An increase in the total private dwellings available to residents over the ten-year period of 2006 to 2016

A community that supports the healthy lifestyles of its residents.

This goal is aligned with the Teslin community value of “*the health of our residents.*”

We will ensure that the suitable knowledge, programs and facilities are available to residents to allow them to maintain active and healthy lives.

Measures of success for this goal are:

- Regular and annually increasing participation rate of residents, of all ages, in organized community activities and events.

A diverse and sustainable economy.

This goal is aligned with the Teslin community value of “*respect for our neighbours, our community, and ourselves*” and “*the natural environment that sustains our community*”.

A healthy economy is essential to allow all residents to provide for themselves and their families while allowing our governments and the private sector to provide services for the

community. We will build a local economy that benefits from and respects our natural environment, and is diversified to avoid boom and bust cycles.

This goal can be measured by employment and population figures and the development of a community economic development plan. Further measures include:

- An increase in the value of the municipal tax base over the ten year period of 2006 to 2016
- An increase in the number of “industry divisions” in which residents are employed over the ten year period of 2006 to 2016
- An increase in the employment rate over the ten-year period 2006 to 2016.

An environmentally sustainable community.

This goal is aligned with the Teslin community value of “*the natural environment that sustains our community.*”

We have an obligation as individuals, businesses and governments to ensure that our actions and behaviour contribute to a sustainable environment on a local and global level. To help us become more sustainable, we will work to reduce and eventually eliminate the contribution we currently make to unsustainable practices through our infrastructure, energy and water use, and waste management.

We will incorporate sustainability principles into all planning processes and consider the ICSP before any major decisions are made by the Municipal and/or First Nation governments. We will measure our success in meeting this goal in these ways:

- A decrease in energy required to run Municipal and First Nation buildings and operations
- A decrease in waste entering the landfill
- A decrease in the amount of water used per capita within areas serviced by Municipal water distribution/delivery.

The protection and preservation of the Tlingit culture, heritage and language.

This goal is aligned with the Teslin community value of “*our Tlingit heritage and culture.*”

We will work as a community to promote the protection and preservation of the Tlingit culture, heritage and language. It is an important part of our community’s identity and an asset in creating a sustainable future.

We will measure our success in meeting this goal in these ways:

- An increase in the number of Tlingit language speakers
- An increase in the number of traditional Tlingit trails and camps formally recognized and protected

An increase in the knowledge, skills and capacity within our community members to support personal goals and contribute to our shared community goals

This goal is aligned with the Teslin community value of “*knowledge, learning, and education.*”

Increasing community capacity through education, training and skills development will support individuals in achieving their personal goals. We also recognize that building our knowledge and capacity plays a critical role in allowing us to meet our community goals.

Although capacity building is difficult to measure and differs for each individual, we feel these indicators touch on essential skills related to community capacity:

- An increase in the number of apprentices and licensed, ticketed trades people.
- An increase in the number of courses completed at the Yukon College.
- An increase in the number of posted work opportunities filled by qualified local community members.

Sustainability

The concept of sustainability includes the ability of people to meet their basic personal needs. These needs include the infrastructure and resources that allow people to live comfortably, as well as the physical and emotional health to allow them to realize their full potential.

It is equally important that these personal needs are met in a way that does not make it more difficult for others to meet their own needs. This includes the needs of future members of our community and of society in general.

We are all dependant on nature to provide the basic necessities of life including clean air and water. As well, nature provides the food we eat, the raw materials that provide shelter and many of the objects that enhance our lifestyle.

There are limits on the ability of nature to provide these necessities, and too often we damage nature beyond its capacity to renew itself. For generations the people of the Teslin area lived within the limits set by nature. To be truly sustainable today and in the future, society must re-learn how to exist within the natural cycles of the planet we live on. The damage that we do to nature can be divided into three categories:

Increasing Accumulations of Substances Extracted From the Earth

Many substances that we extract from the earth such as oil, gas, metals and minerals, contribute to the lifestyle that we enjoy today. These substances will eventually break down and return to the earth's crust. However, at the current rate of consumption, these substances build up in the ecosystem harming living organisms and the ecosystem itself. Problems can include an increase in greenhouse gasses contributing to climate change, and metal levels in nature such as mercury that can impact our wildlife.

In practical terms, this means we should increase recycling and reuse of these materials, and reduce our dependence on fossil fuels.

Increasing Accumulations of Substances Produced by Society

Society also produces matter that is not found in nature. Chemical fertilizers and pesticides are among many synthetic compounds that we produce and disperse into nature. These manmade compounds can takes thousands of years to completely break down. The build up of these compounds in the food chain harm wildlife, and can cause diseases such as cancer in humans.

This means discouraging the use of these persistent human made substances, and finding safer, natural alternatives.

Physical Degradation of Nature

We meet many of our needs as a society from renewable resources. This includes harvesting fish and other animals for food, and harvesting trees for the manufacture of wood and paper products. We can continue to use these resources, but we must do so at a rate and methods that allows them to replenish themselves.

In practice, this means minimizing the destruction of habitat that supports the natural diversity of the ecosystem, and using wood and paper from sustainably harvested forests.

Our Sustainability Principles

In order to begin the journey towards becoming a truly sustainable community, Teslin has chosen to use adopt sustainability principles. These principles are valuable tools to help us examine our current practices and align our future actions with the natural cycles of our local ecosystem and our planet.

As we plan for the future, Teslin will use these sustainability principles to help guide our decisions.

Based on The Natural Step sustainability principles, our community sustainability objectives are to:

1. Minimize and eventually eliminate our contribution to the accumulation of substances extracted from the earth.
2. Minimize and eventually eliminate our contribution to the accumulation of substances produced by society.
3. Minimize and eventually eliminate our contribution to the physical degradation of nature.
4. Ensure that all residents are able to meet their own needs and realize their full potential, in a way that does not reduce the ability of others to do the same.

Teslin Goals

Current Reality and Description of Success

As part of our sustainability planning, it is important to recognize and document where we are today in terms of the community goals that we have established. This “**current reality**” will help us identify where we need to focus our efforts to realize our goals, and will help us measure the progress we make as we move towards sustainability.

It is even more important to have a clear idea of what exactly we want to achieve. What will our community look like if we are successful in reaching our goals? This “**description of success**” will ensure that we have a defined idea of what we are hoping to become, and will serve as our destination as we develop our road map to sustainability.

Goal - A community in which all residents are able to meet their basic needs.

We must ensure that all residents of Teslin are able to meet their needs. These include, but are not limited to, the most basic needs of healthy and adequate food, and safe and appropriate housing.

Current Reality:

While Teslin is a community where most residents are able to meet their basic needs, this is not true in all cases. Some residents are unable to meet their basic housing needs because a lack of available housing and/or affordability issues. While housing upgrades continue in the community, some poor quality housing stock remains. There is a four unit senior’s social housing complex, but this does not meet the need for assisted living options and accessible housing for seniors. Seniors are often forced to leave the community as they age.

Traditional foods remain important to community members, and for the most part, people have access to healthy food in Teslin, although not all residents maintain a healthy diet. A “Meals on Wheels” program is available, a community and school lunch program is provided on Wednesdays and healthy snacks are offered to students during the day. A local “free store” provides the opportunity for residents to acquire needed items such as clothing.

The community of Teslin is a relatively safe community in which to live. Teslin has an RCMP detachment with three members, a nursing station with two nurses and a Yukon government Social Services worker. The Teslin Tlingit Council provides health and social services to citizens, and is initiating programs to address bullying and violence in the community. There are two part time home care workers in Teslin, and the community greatly benefits from the contributions of volunteer fire, ambulance and search and rescue services.

Substance abuse remains an issue that affects some residents in Teslin.

Description of Success:

In a sustainable Teslin, all residents have access to healthy, organic, locally produced food. Residents feel safe and secure in their homes and in their community, and affordable and varied housing is available for all residents.

Land use planning is in place to allow for the provision of land to meet these requirements, and the land is developed so to protect and enhance the close connection that residents feel to nature and green spaces within and around the community.

The housing in Teslin is sustainable by virtue of its use of sustainable materials, renewable energy, and resource efficient construction techniques.

Support systems are in place to ensure that these basic needs are met, including assisted living as appropriate and a safe house if required. Each resident enjoys the respect of the other residents, and discrimination does not exist.

Goal - *A community that supports the healthy lifestyles of its residents.*

We will ensure that the suitable knowledge, programs and facilities are available to residents to allow them to maintain active and healthy lives.

Current Reality:

Teslin residents enjoy great access to both water and land based outdoor recreation activities. The community also enjoys a large number of built recreation facilities including:

- Curling Rink
- Indoor Ice Arena
- Community Centre
- Baseball Diamond
- Skateboard Park
- Playground
- Skiing and Walking Trails
- Public Docking
- School Gymnasium
- Dirt Bike Track (coming soon)

Any lack of participation in recreational activities is likely due to personal choice. This may be due to the busy lives that many people lead, or a lack of understanding of the personal and health benefits of an active lifestyle. A recreation programmer supports

participation by providing the required organization thus removing some of the burden from community volunteers.

There are many residents involved in less physically strenuous activities, including traditional activities such as sewing, beading, carving and drum making. Culture camps are also part of the active lifestyle of Teslin residents.

Some impediments to healthy lifestyles do exist in the community. Costs for some recreational programs are increasing as the expenses associated with them increase or the participation rate decreases. Waterfront use is somewhat limited due to access difficulties and debris along the shoreline. Residents who suffer from substance abuse are unable to enjoy the full benefits of the activities available.

Description of Success:

In a sustainable Teslin, all residents lead active, healthy lives. We operate quality facilities which offer residents a wide range of recreational opportunities within the financial capacity of the Village of Teslin and the Teslin Tlingit Council, and the capacity of the many organizations that support community recreation.

All Teslin residents, including the private sector, appreciate the value of active living and support and are engaged in community recreation. We maintain access to many outdoor recreation opportunities in the surrounding wilderness that remains undiminished in its quality.

All residents have leisure time to participate in their chosen activities and Teslin residents live longer lives due to their healthier choices in diet and lifestyle.

Goal - *A diverse and sustainable economy.*

A healthy economy is essential to allow all residents to provide for themselves and their families while allowing our governments and the private sector to provide services for the community. We will build a local economy that benefits from and respects our natural environment, and is diversified to avoid boom and bust cycles.

The economy in Teslin is largely based on government employment. The Teslin Tlingit Council is by far the largest employer in the community, and other public sector jobs are provided by the municipal, territorial and federal governments.

The private sector jobs in Teslin are in numerous, relatively small sectors, including tourism, retail and construction.

Tourism is primarily based on the Alaska Highway traffic that passes through town, although a visitor based economy focused on wilderness tourism, big game outfitting, and fishing is also present. Trapping still provides income to some residents, and tourism based on trapping is a relatively new opportunity.

Resource development is not currently a large segment of the economy. There has been an active forestry industry in the past, and the recent completion of a Regional Forest Management Plan may facilitate increased forestry opportunities. There is some mineral exploration in the area, including at Morley River, Red Mountain and the Wolf River. None of these properties are close to the development stage.

Description of Success:

In a sustainable Teslin, the economy is diverse and resilient. An active private sector means less reliance on government, and the economy is strong year round.

Teslin is a destination for tourists based on its wilderness attributes, and highway travellers spend more time in the community in large part due to the vibrant culture, heritage and craft opportunities anchored by the Tlingit traditional lifestyle.

Forestry is active, and based on sustainable harvesting that recognizes and accommodates other values and users of the land. It is focused on value added products for the Yukon market, and biomass as a community energy source.

Mineral development is carried out in an environmentally sensitive manner that maximizes local benefits. We are not reliant on mineral development due to its cyclical nature and boom and bust tendencies.

The strong economy in Teslin provides a wide range of services in the community.

Goal - *An environmentally sustainable community.*

We have an obligation as individuals, businesses and governments to ensure that our actions and behaviour contribute to a sustainable environment on a local and global level. As a community, we will work to reduce and eventually eliminate the contribution we make to unsustainable practices.

Current Reality:

While we enjoy a reasonably healthy environment in our community, there are practices that can be improved.

On the positive side, Teslin Lake is clean and healthy, as is most of the surrounding wilderness. Higher building standards are being implemented, and renewable energy use in the community includes biomass (wood) and solar power. Virtually all of the electricity used in Teslin is generated through renewable hydro.

A forest management plan is in place, and the Yukon Environmental and Socio-economic Assessment Act ensures that all projects are assessed for environmental impacts. The wastewater treatment lagoon is effective and regular hazardous waste collection and the

annual town clean up protect our community from environmental degradation. The Recycling Program in town attracts 50% of households.

Areas of concern include a dependence on fossil fuels for heating and transportation around town and out of town, and continued burning at the local landfill. The lack of an effective composting program keeps our waste levels fairly high. The per capita water use is also relatively high, and damaging materials in buildings are still prevalent. Some waste in the Lake and River from Alaska Highway construction remains.

While they would provide economic benefits, potential future developments such as a gas pipeline, mineral exploration and development projects, and the increased use of Teslin Lake must be carefully considered and impacts mitigated. The lack of a regional land use plan hinders effective decision making related to economic development and environmental sustainability.

Description of Success:

In a sustainable Teslin, environmental sustainability is paramount in all of our decisions and community projects. We have an effective waste diversion program that includes reuse, recycling and composting that result in zero waste in the community. Our infrastructure uses environmentally friendly materials, and is designed and constructed for maximum energy efficiency.

100% of our energy requirements are provided by renewable sources, and a regional public transportation system supports our energy efficiency goals.

We have limited our community footprint to an area corresponding to the footprint of the community in 2007 plus all of the land identified by the Village of Teslin and the Teslin Tlingit Council for future development at that time. All of the open space and parkland identified in 2007 has been retained. This was achieved through collaborative land development planning between the two local governments that ensured community needs were met in the most effective and efficient manner possible.

An effective land use plan that protects the wilderness around our community, including our water sources and biodiversity guides all relevant decisions of all governments with jurisdiction in the region.

Goal – An increase in the knowledge, skills and capacity within our community members to support personal goals and contribute to our shared community goals.

Expanding the knowledge and skills base of our population will allow all residents to reach and enhance their own personal potential. It will also strengthen our society as a whole thus supporting the common ambitions that we share as local governments and as a unified community.

Current Reality:

Teslin faces many of the same challenges faced by communities across Yukon, including a small population and a shortage of some local building trades and other skilled workers to meet the community's needs.

As a result, our community is sometimes dependent on short-term labour from outside employers and contractors. This reliance on outside skills feeds a cycle whereby local opportunities are given to outside workers who do not stay long term, reducing training and employment opportunities for those who live in the community. Without the training and employment opportunities, those local residents who do have basic abilities are not given the opportunity to expand their skills.

Teslin does have some significant educational resources, including kindergarten to grade nine schooling and a Yukon College campus that offers general courses and some videoconferencing. However, there is no high school. In addition, some within the community are unable to access the opportunities that do exist through the college.

The day-to-day responsibilities that the local governments face on a day-to-day basis impede their ability to fully address the educational challenges. While the Village of Teslin and the Teslin Tlingit Council staff have adequate basic skills, both governments face challenges in filling entry-level positions. Both governments would benefit from additional capacity within existing staff and from an influx of new individuals with relevant skills and experience.

A gap in housing infrastructure can contribute to the challenges of attracting long-term staff. Increased awareness and understanding of sustainability challenges and principles among the general public is required. Both of these issues will have to be addressed if the other challenges are going to be met.

Description of Success:

A sustainable Teslin is a community where educational needs for residents of all ages are met from kindergarten, through elementary and high schools, and beyond into college level courses. Complementing our strong educational core is a diverse list of technical and trades courses and programs.

TTC has been able to enhance capacity within its own citizens to ensure that all TTC members are employed. A key part of TTC's capacity building is a focus on traditional skills and knowledge, such as carving, traditional crafts and cultural pursuits. By bringing traditional knowledge and skills into the workplace, TTC has been able to ensure that heritage values have been passed on to successive generations in the context of a strong, skilled and self-sufficient government.

All positions in the community are filled by well-trained, qualified local residents. This capacity growth has helped ensure that infrastructure and services are provided to citizens in a sustainable manner with limited reliance on outside contractors and workers.

Teslin residents understand and value sustainable living principles and they have been able to transfer that into a healthy lifestyle.

Goal – *The protection and preservation of the Tlingit culture, heritage and language.*

Our community's identity is linked to and in some ways, dependent on the Tlingit culture, heritage and language. It is in the interest of all citizens to know and understand the culture, to respect the heritage and to encourage the use of and preservation of the language.

Current Reality:

The Tlingit culture, heritage and language are an integral part of community life. However, there are significant challenges to ensuring that those elements of community life are sustained and improved.

Some of the most significant challenges exist in the area of language preservation, due to the limited number of fluent Tlingit speakers. The existing Tlingit class in school does help, but without an increased investment of time and resources, the language will remain at risk.

Broader cultural and heritage activities are supported by core infrastructure, such as the Heritage Centre, the George Johnston Museum and trail and historic sites and buildings. However, greater formal recognition and protection of the historic sites and buildings is required, and there needs to be a greater respect for and preservation of historical trails and routes.

There are existing opportunities to teach traditional cultural pursuits and to pass on traditional knowledge. Courses are offered in moccasin and blanket making, carving and drum making. A kids culture camp is held regularly, the TTC government is still based on the traditional Clan system and traditional ceremonies remain an important part of daily

life. In addition, sustainable lifestyles, such as hunting, fishing and gathering, are still important to TTC citizens, as are land and water-based values.

In a modern world, it is sometimes a challenge to keep youth interested in land-based learning and it is increasingly difficult to attract youth into traditional activities. The preservation and protection of Tlingit culture, heritage and language is directly tied to ensuring that youth value and engage in traditional pursuits.

Description of Success:

In a sustainable Teslin, the Teslin Tlingit Council have succeeded in preserving the Tlingit language by passing a Language Act and implementing a traditional knowledge framework, which together bring the language into the every day activities of government.

A complete heritage and language strategy, combined with the strong focus on language usage, has created a strong, nurturing environment for the preservation and cultivation of the Tlingit culture, heritage and language.

In concrete terms, every Tlingit citizen is fluent in the language and there is a strong interest among non-citizens in the culture and heritage and how it can contribute to community life as a whole.

Through this shared respect, the community has been able to work together to preserve and protect known heritage buildings, sites and trails, while ensuring any development respects these heritage resources. Adding to the economic sustainability of the community, there is a growing market for traditional crafts and cultural performances.

We are community that values our Tlingit past and we have ensured that it remains an integral part of our community into the future.

Community Evaluation
Teslin Baseline Sustainability Analysis

Based on The Natural Step sustainability principles, our community sustainability objectives are to:

1. Minimize and eventually eliminate our contribution to the accumulation of substances extracted from the earth.
2. Minimize and eventually eliminate our contribution to the accumulation of substances produced by society.
3. Minimize and eventually eliminate our contribution to the physical degradation of nature.
4. Ensure that all residents are able to meet their own needs and realize their full potential, in a way that does not reduce the ability of others to do the same.

As a beginning, a sustainability analysis has been conducted in four critical areas. These focus areas are water, energy, solid waste, and transportation. We have identified some of the ways that we are currently in contravention of our sustainability objectives in these areas, and we have also documented some of the current positive practices that we can use as building blocks.

What follows is a general summary of the sustainability analysis conducted, including identified challenges and positive building blocks.

Priorities for action in each of the focus areas are also included.

Focus Area – Water

Identified Challenges

Like most communities, Teslin's greatest challenge may be its over-dependence on fossil fuels. That challenge extends to the water infrastructure, which is heavily dependent on fossil fuels throughout the distribution system. In addition, the existing infrastructure is traditional in nature, and as such represents a significant amount of extracted materials, from the steel pipes to the fibreglass home water tanks. Some of that infrastructure is aging and requires replacement.

Adding to the issues is the prevalence of man-made chemicals throughout the water system. From the chlorine that treats the drinking water to the epoxies and resins used in tank construction to household chemicals inadvertently added to the sewage lagoon, the water system includes the use and introduction of chemicals at many stages.

The community's use of the water, from recreational use of the lake to level of water consumption have the potential to compound sustainability issues, as do the occasional leaks in the waste water system that are the result of aging infrastructure.

Within this context of over-dependence on extracted and man-made materials and potential ongoing degradation through human activity, the town still cannot claim to be fully meeting the human needs of all residents. Some private wells are contaminated, the delivery truck occasionally runs into contamination issues, and the cost of providing water and waste services can be beyond the reach of some residents.

Positive Building Blocks

Teslin has started to address some of the issues in the water system. Older home water tanks are being removed, efforts are being made to introduce water conservation measures into government owned buildings and new national standards for drinking water quality will ensure that community drinking water remains clean. The Village of Teslin has almost eliminated the lift stations in the wastewater collection system. These factors represent an existing commitment on the part of the community to address the water system issues, while pointing to a desire to face the challenges that still exist.

Priorities

- Secure lagoon site to eliminate inappropriate dumping in the lagoon
- Stop use and disposal of dangerous household chemicals into the waste water treatment system through a combination of statute and public education
- Secure water source integrity by taking steps to protect Teslin Lake, the Nisutlin River and the area aquifers
- Eliminate the last remaining lift station through infrastructure upgrades
- Initiate water conservation efforts, including public education efforts

Focus Area – Transportation

Identified Challenges

All vehicles are made from extracted materials, and most of them use fossil fuels for power. In a community like Teslin, where many supplies, jobs and services are only available two hours drive away, the problem is compounded. The roads themselves are built and maintained using materials such as aggregates, oil, salt and calcium and fuel extracted from the earth.

The impact of man-made materials is also a big part of the transportation challenges. Whether it's wiper fluid, engine additives or just cleaners used to keep our vehicles looking shiny, every facet of vehicle ownership and use has negative impacts on the community's sustainability goals.

In terms of degradation, recreational use of boats, ATVs, snow machines and other similar vehicles can lead to inevitable leaks and contamination in the lakes, rivers and surrounding trails. Many of the engines used in these types of vehicles are less efficient than even car engines, increasing the problem.

In addition to the high environmental sustainability costs for transportation infrastructure and vehicles, the ability of residents to meet their own needs can be affected. As fuel costs rise, so do prices for all products, from gas to food. Heavy use of vehicles also leads to increasing infrastructure maintenance costs and diverts funds away from other important government projects.

Positive Building Blocks

Teslin has taken some real action to reduce the impact of transportation on sustainability. TTC provides some public transportation for citizens. There is a small community footprint that supports walking and biking, rather than driving. There's also a municipal "no idling" policy and fairly extensive program in place to recycle materials used in the transportation system such as metals, tires, glass and oil.

Priorities

- Add trails in the community to promote walking and biking
- Develop alternative source for vehicle fuels, especially in municipal and TTC vehicles (eg. electric vehicles)
- Increase recycling efforts to reduce transportation of waste
- Lower water usage, in an effort to reduce impact of trucked water delivery
- Improve solid waste collection in town, so that individuals are not making regular trips to landfill, thereby reducing vehicle use for transporting waste
- Introduce some form of vehicle disposal/recycling program
- Reduce salt/calcium use for roads, while maintaining road safety

Identified Challenges

Many aspects of life in northern communities can be energy intensive and the situation is no different in Teslin. Fossil fuels form the majority of heating in public and private buildings. However, many community residents use wood heat as a primary or secondary source of heat. Wood is a renewable resource as long as it is harvested sustainably. There is a limited amount of energy efficient lighting in the community, which only adds to the use of energy. Compounding the problem is the fact that Teslin remains on diesel generation backup. While the use is rare, its very existence points to a sustainability challenge.

Most of the heating appliances are constructed from extracted metals. In terms of man-made materials and their introduction into the natural landscape, the most prevalent problem is once again the use of chemicals such as glycol in existing heating and energy infrastructure. Even solar energy systems are commonly constructed, at least in part, from plastic.

As with the water system, one of the greatest challenges in terms of meeting human needs is cost. All fuels are expensive and even getting wood requires fuel for the vehicle. As a result, there are some people in the community who struggle throughout the winter months.

Positive Building Blocks

There are many positive initiatives already underway to address Teslin energy issues. The First Nation is undertaking energy audits and retrofitting projects, while the municipality is trying to build energy conservation into its infrastructure. The arena already has a waste-heat recovery program in place, and most electrical energy used is produced by renewable hydro, rather than diesel. There is a growing knowledge of and use of Energy Star appliances, as well as the increasing use of energy efficient compact fluorescent bulbs.

Priorities

- Improve energy efficiency in public and private buildings
- Explore the potential for developing renewable energy resources
- Evaluate the potential for biomass-based district heating system or other sustainable district heating systems
- Investigate potential to tap into geothermal energy from Teslin Lake
- Take steps to improve the energy efficiency of lighting, particularly within municipal buildings

Focus Area – Solid Waste

Identified Challenges

The biggest sustainability challenge related to solid waste is the actual disposal of goods and materials that are not recycled or reused. Plastics, chemicals and manufactured goods all end up at the dump. In addition, the seasonal burning releases chemicals into the atmosphere, spreading the contamination into the air and out over the surrounding area.

Fossil fuels are still used in the collection of waste and in the manufacturing of plastic bins and cans. In addition, the infrastructure at the dump is almost entirely metal, from the recyclable collection bins to the fence the rings the perimeter.

In terms of ecosystem degradation, the dump is, itself, a physical degradation. In addition, the burning of waste causes the release of chemicals into the environment.

Once again, cost is a primary human needs issue, both in terms of the direct cost to residents and in terms of the lost opportunity that results from government's expenditures on solid waste collection and on funding the liability created by the dump. The "throw away" nature of society, as epitomized by the dump, is a strong indication of the scope of the sustainability challenges facing Teslin.

Positive Building Blocks

There are already several initiatives underway designed to reduce the solid waste footprint. There is a fairly extensive recycling program for both refundable and non-refundable items, as well as proper segregation of the various materials. There is regular hazardous waste collection and these hazardous wastes are kept separate and disposed of appropriately. In addition, the dump is fully fenced, which helps reduce the number of animals that get into the facility while supporting the proper disposal of waste.

Priorities

- Increase waste diversion programs and invest in additional waste-diversion infrastructure
- Determine the existing environmental liabilities of the existing landfill site
- Staff the dump facility year-round to help ensure that users dispose of waste appropriately
- Reduce emissions from dump by finding alternative to traditional open burning

Infrastructure Priorities

While not every issue identified in the sustainability analysis is directly related to infrastructure, in some instances an investment in public infrastructure is required to realize the community's goals.

The infrastructure projects presented below are consistent with the vision set out in this document, move the town in the right direction, provide a flexible platform for future innovation and offer a reasonable return on investment.

Short Term

Secondary water supply: Currently the community of Teslin is reliant on a single source for their water supply. To provide redundancy and ensure uninterrupted water for residents, a secondary source is desired. Depending on the source of the back up supply, additional filtration may be required.

Drinking water filtration system: Although Teslin drinking water falls within the current guidelines, the recent announcement of impending new Yukon drinking water guidelines will result in arsenic levels in Teslin water being higher than allowed. A new filtration system will be required to meet the new guidelines that come into effect in 2010.

Recreation centre water supply: The recreation complex is currently suffering from less than ideal water quality. The existing water supply in the recreation centre is from a dedicated well, and new equipment within the building is required to enable the switch to the higher quality municipal water supply.

Sewage lagoon aeration: The installation of a aeration system in the wastewater lagoon will allow the introduction of air to promote microbial action to biotreat the pollutants in the wastewater. It may be possible to power aeration system with wind energy.

Monitoring wells: By investing in monitoring wells, the town will be able to measure the potential for groundwater contamination from the landfill site. Investment in these test sites can help protect aquifers and well as guard against future environmental liability.

Waste oil burner: Most residents maintain at least one vehicle, while industry and governments maintain fleets of vehicles. In all cases, there is a requirement to dispose of waste oil in an environmentally friendly way. Currently, waste oil ends up in the landfill or being stored and transferred to appropriate facilities outside of the community at a cost. A waste oil burner will replace some existing fossil fuel use while contamination from illegally disposed of waste oil can be reduced and the cost of proper disposal can be eliminated.

Recreation centre waste heat storage: The village currently uses a Cimco waste heat recovery system on its new ice plant at the recreation centre. The waste heat that is captured often exceeds the current demand for heat in the building. Cimco also makes a waste heat storage system that allows excess waste heat to be stored until it is needed.

This system would further decrease the amount of fossil fuel required to heat the community recreation centre.

Retrofit existing buildings: In the immediate future, there is the potential for significant reduction in energy use through investment in retrofits for public buildings. By upgrading the energy efficiency of buildings, the community will reduce the costs of maintaining those buildings, which will in turn, free up more public funds for other worthwhile projects. In addition, there will be a reduction in fossil fuel use.

Bike/walking trails: One of the easiest ways to encourage residents to reduce vehicle use, and by extension, fossil fuel consumption, is to invest in an expanded bike and walking trail system. In addition to the reduction in fossil fuel consumption, this initiative will help foster a healthy lifestyle.

Solid Waste Incineration Vessel: While burning waste is not a desirable sustainability action, the current landfill employs burning to increase its lifespan. Using a incineration vessel would provide a safer burning environment in the short term as the community moves towards implementing a significant waste diversion program.

Wood chipping at landfill: Brush and other wood brought to the landfill is currently deposited as is into the facility. A chipper would increase waste diversion by allowing appropriate wood to be chipped for use as landscaping material or as fuel in a biomass heating system.

Composting program: A significant portion of waste material in the village is actually compostable. The establishment of a composting program, including the required equipment, would make a very significant contribution to reducing the amount of waste entering the landfill.

Solid waste plan/ Transfer station: (short/medium term) The current landfill represents an environmental and economic liability. While necessary at this stage, Teslin would like to develop a solid waste plan in the short term focused on significant waste diversion, which could include a strategy for developing a transfer station to replace the landfill. Making these investments will help the community move beyond some of the challenges associated with the current landfill, including waste burning and ongoing ecosystem degradation.

Medium Term

Fence / Gate lagoon: The existing lagoon does a good job of ensuring the town's effluent discharge is well within national standards. One area of concern is the potential for contamination from outside sources. Protecting the lagoon from contamination is best accomplished by setting up a fence and gate. Taking this step will ensure that individuals will not be able to access the lagoon for dumping toxins, vehicle oil or other materials which can compromise the lagoon's effectiveness.

Wellhead protection: The village's well provides reliable, safe drinking water. Protecting the wellhead has a two-fold benefit. In terms of human need, wellhead protection will help ensure the potability of the community's drinking water. In addition, protecting the wellhead at this stage will help reduce unexpected costs related to maintaining or replacing infrastructure, which could be left vulnerable without this pre-emptive investment.

Geothermal/Biomass heat source / small-scale district heat: (medium/long term)

Reducing Teslin's dependency on non-renewable energy will be a key part of meeting our sustainability objectives. Teslin will investigate the potential for biomass heat (wood) and geothermal heat from either the ground or lake. The size and scope of any energy project will depend on the outcome from feasibility studies.

Teslin will develop a small-scale district heating system to utilize the geothermal or biomass heat for public buildings and reduce dependency on fossil fuels for heating.

Alternative fuel government vehicles: (medium/long term) Investing in alternative fuel vehicles, as existing fleet vehicles are replaced, would significantly reduce fossil fuel use in the community. Current options include electric and hybrid electric/gas engines, and new technologies will likely emerge in the near future. Implementation of this change will require careful analysis of long-term environmental benefits and economic costs.

Regional public transportation: (medium/long term) Many Yukon communities are dependent on each other for economic, cultural and social needs. As a result, there is a significant amount of regular commuting between different towns. A regional public transit system developed in partnership with other communities and governments would mitigate the economic and environmental costs of transportation in the relatively rural and remote communities in the Yukon.

Long Term

Solar panels for arena: The community arena is an integral component of Teslin's quality of life. It is an important recreation facility that encourages a healthy lifestyle, while providing an opportunity for community gatherings. Already, the facility has a waste-heat capture system, which helps reduce energy costs. It is expected that the cost of solar panels will drop significantly in the future and it may eventually be worthwhile to invest in solar panels to further reduce energy consumption.

Teslin Shared Community Services

Service agreements between two local governments can help reduce costs and avoid needless duplication of services. This can help contribute to the financial sustainability of both governments and the community as a whole. In Teslin, many services are offered and shared between the municipality and the First Nation. Based on an excellent relationship, many of these agreements exist without formalization.

Service Provided	Service Provider	Nature of Agreement	Current End Date	Cost of Service	Rate Service (Good, fair, or poor)
Construction and Maintenance Skateboard Park	Teslin Tlingit Council/Village of Teslin	Formal Service Agreement	In Perpetuity	In kind contribution maintenance/land	Good
Construction and Maintenance Sewer Development	Teslin Tlingit Council/Village of Teslin	Formal Service Agreement	In Perpetuity		Good
Arena	Village of Teslin	Informal Service Agreement	In perpetuity	\$20,000/year for Operation and Maintenance	Good
Water/Waste water	Village of Teslin	Fee for service	In perpetuity	Charged to residents	Good
Landfill	Village of Teslin	Fee for service	In perpetuity		Good
Fire Protection	Village of Teslin	Informal service agreement	In perpetuity	No fee for service	Fair

Potential Shared Services:

Potential Service	Potential Service Provider	Expected Cost of Service	Is the Service Provided?	Is the Service Provider interested? Have they been contacted?
Recreation Facilities	Joint	N/A	Yes	Yes
Economic Development	Comprehensive Plan	N/A	N/A	N/A
Out of boundaries service	Comprehensive Plan	Fee for Service	N/A	N/A

Land Development	VOT and/or TTC and/or YTG	Dependant	Yes	N/A
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**Community Inventory and Assessment Checklists: Capital Project Infrastructure
Inventory and Assessment**

Capital Project/Infrastructure	Do you have it? Yes/No	What is the condition? Good/Avg/Poor	Is there enough? Yes/No	Do you need it? Yes/No
City Hall	Yes	Average	No	Yes
Airport	Yes	Average	Yes	
Community buildings	Yes	Average	Yes	Yes (Replacement)
Community Hall	Yes	Average	No	Yes
Dock facilities	Yes	Average	No	Yes
Community energy systems	No	N/A	N/A	N/A
Fire station	Yes	Average	No	Yes
Health clinic	Yes	Good	Yes	Yes
Housing	Yes	Average	No	Yes
Internet service	Yes	Good	N/A	Yes
Library	Yes	Average	No	Yes
Police building	Yes	Good	Yes	Yes
Post office	Yes	Average	Yes	Yes (Replacement)
Recreation (parks)	Yes	Good	Yes	Yes
Roads	Yes	Poor	Yes	Needs replacement
Schools	Yes	Average	Yes	Old, needs replacement
Sewage collection and disposal	Yes	Good	Yes	Yes
Solid waste disposal	Yes	Good	Yes	Yes
Water service	Yes	Good	Yes	Yes
Public transportation	No	N/A	N/A	No
Active transportation	Yes	Average	Maybe	Yes
Youth centre	No	N/A	N/A	Yes
Other				

Community Inventory and Assessment Checklists: Social, Health, and Cultural Services Inventory and Assessment

Resource Category	Type of Service	Does this exist? Yes/No	Can it be improved? Yes/No
Health	Nutrition	Minimally	Yes
	Weight loss	Minimally	Yes
	Aids prevention	Minimally	Yes
	Substance abuse	Yes (TTC)	Yes
	Family planning	Health Clinic	Yes
Public Safety	Police protection	Yes	No
	Fire protection	Yes	Yes
	Emergency response	Yes	More volunteers
	Search and rescue	Yes	More volunteers
Recreation Programs	Small children	Yes	Yes
	Teens	Yes	Yes
	Adults/Seniors	Yes	Yes
Social Service Programs	Child care	Yes	No
	Domestic violence	No	Yes
	Seniors	Yes	Yes
	Disability services	Yes	Yes
	Counselling – adults	Minimal	Yes
	Counselling – teens	Minimal	Yes
	Legal services	No	No
	Suicide prevention	No	Yes
Self Government	Self government status	Yes	No
Cultural Programs	Elders group	Yes	N/A
	Music	Limited	Yes
	Subsistence food preparation	Yes	Yes
	Dance group	Limited	Yes
	Arts and crafts	Yes	Yes – marketing
	Language programs	Limited	Yes
	Spirit camps	Yes	Yes
	Storytelling	Yes	Yes
	Other	N/A	N/A

Community Inventory and Assessment Checklists: Economic Inventory and Assessment

Type of Typical Job	Number of jobs?	Is the job filled by a person in the community? Yes/No	Full time? Yes/No	Seasonal? Yes/No	Wage example
Arts and crafts	35	Yes	Yes	Yes	
CAO/Executive Director	2	Yes	Yes	No	
Accounting officer	5	Yes	Yes	No	
Environmental specialist	4	Yes	Yes	Yes	
Logger/Forester	13	Yes	Yes	Yes	
Health aide/Nurse	2	Yes	Yes	No	
Heavy equipment operator	7	Yes	Yes	No	
Mechanic	1	Yes	Yes	No	
Construction	9	Yes	Yes	Yes	
Housing manager	2	Yes	Yes	No	
Public safety officer	3	Yes	Yes	No	
Fire fighters	10	Yes	No	No	
Emergency response	16	Yes	No	No	
Business owners	21	Yes	Yes	Yes	
Counsellor	3	Yes	Yes	No	
Water treatment operator	2	Yes	Yes	No	
Sewage treatment operator	1	Yes	Yes	No	
Landfill operator	1	Yes	Yes	Yes	
Power plant operator	0	No	No	N/A	
Health and Social Services	2	Yes	Yes	No	
Childcare Supervisor	1	Yes	Yes		
Recreation Programmer/Director	2	Yes	Yes	No	
Other					

Community Inventory and Assessment Checklists: Environmental Inventory and Assessment

Environmental Assets/Needs	Do you have it? Yes/No	If this is lacking, does your community need it? Yes/No
Safe drinking water	Yes	
Adequate supply of water	Yes	
Certified water treatment operators	Yes	
Safe sewage disposal and treatment	Yes	
Permitted landfill	Yes	
Recycling program	Yes	
Used oil storage area	Yes	
Lead acid battery collection area	Yes	
Developable land	No	Yes
Fuel spill prevention plan	Yes	
Hazardous waste response plan	Yes	
Erosion control	No	Some lakeside areas
Contaminated sites identified	Some	Some contamination left
Healthy subsistence food	Yes	
Environmental Education programs	Some	Yes
Healthy wildlife populations	Yes	
Hazardous waste collection area	Yes	
Protected watershed plan	No	Yes – all water, not just drinkable
Environmental impact statement	Yes	
Other		
Other		

Community Inventory and Assessment Checklists: Capacity Building and Job Training Inventory and Assessment

Capacity Building/ Training/Education Opportunities Category	Type	Does this job exist in the Community? Yes/No	Training/education needed? Yes/No	Is training available in the Community? Yes/No
Municipal or First Nation Administrative Positions	CAO	Yes	No	No
	Accounting Officer	Yes	No	No
	Other			
	Other			
	Other			
Education	Principal	Yes		
	Teachers	Yes	No	No
	Teacher aides	Yes	No	No
Health	Health aide	Yes	No	
	Nurse practitioner	Yes	No	No
	Doctor	Yes	No	No
	Health Coordinator	Yes	No	
Transportation Utilities	Driver/pilot			
	Water treatment operator	Yes	No	No
	Sewage treatment operator	Yes	No	No
	Landfill operator	Yes	No	No
	Power plant operator			
	Water delivery service operator	Yes	No	No
Justice	Coordinator	Yes	No	No
	Negotiator	Yes	No	No
	Clerk	Yes	No	No

