



**Integrated Community  
Sustainability Plan  
(ICSP)**

**December, 2007**

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## **The Planning Process**

In contrast to every other Yukon municipality, the Town of Faro does not have a First Nation government presence in the community. Therefore there are no cooperation requirements in the ICSP planning and there are no Service Agreements or potential Service Agreements between municipal and First Nation governments in the community.

Faro embarked on its sustainability planning process in the early spring of 2006 with a public meeting to introduce the concept of sustainability planning to Faro residents and solicit input on the planning.

The public meeting was advertised in the Yukon News on March 17 and 27, 2006.

### **ICSP Public Meeting #1 – April 6, 2006.**

A community survey was distributed to every household in the community and a local Sustainability Committee made up of municipal staff, elected members of council and members of the community at large was established. The committee worked diligently over the course of the planning to ensure that the final product reflected the values of the residents of Faro.

Two further public meetings were held with the second meeting providing an opportunity for residents to review the ICSP community values and goals, and the final meeting where a full draft of the document was presented for review and comments.

The second public meeting was advertised in the Yukon News on January 15 and 22, 2007.

### **ICSP Public Meeting #2 – January 30, 2007.**

The final public meeting was advertised in the Yukon News on November 9 and 14, 2007.

### **ICSP Public Meeting #3 – November 22, 2007.**

This final draft of the Faro Integrated Community Sustainability Plan was passed by the Mayor and Council of the Town of Faro at a council meeting held on December 11, 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 Faro while moving our community closer towards sustainability.

## **Faro Community Profile**

Faro is located in the south central portion of the Yukon along the Pelly River, 365 km northeast of Whitehorse on the Campbell Highway. Nestled in the Pelly mountains and surrounded by pristine wilderness, Faro offers a variety of activities, such as camping, canoeing, cross country skiing, bird and wildlife viewing (cranes, sheep, salmon), fishing, gold panning, golfing, hiking, rock hounding, nature walks, photography, sledding, swimming, snowboarding, snowshoeing, snowmobiling, etc. for residents and visitors alike.

The original construction of the town site occurred in 1968 and the Cyprus Anvil Mine opened officially in 1969. *"Dubbed "Faro" for the gambling card game of the same name, by 1969, there were a number of houses built and ready for occupancy. Then disaster struck. On Friday June 13th, a forest fire swept through the newly built town destroying all the houses except a handful. Undaunted, Cyprus Anvil cleared the debris and rebuilt the town. For years afterward, Faro was not a very attractive community, nestled in the midst of all the burnout."*<sup>1</sup>

However, the mine quickly became the largest private sector employer in the Territory. At that time, it represented well over 1/3 of the economy of Yukon, and by the mid 1970's was the largest lead/zinc mine in Canada. Miners from across the country created a financially rich culture in Faro unlike any other Yukon community.

For a variety of reasons, Cyprus Anvil was forced to cease operations in 1984. The mine changed hands twice following Cyprus Anvil's closure. In 1986, Curragh Resources resumed operations on the site. Curragh continued mining until the mid 1990's when world metal prices and other mitigating factors forced Curragh to declare bankruptcy. The mine closed again in 1993/1994. Anvil Range Mining re-opened the mine in 1995 and operated until 1997. In 1998, Anvil Range Mining Corporation was placed into receivership and all mining operations stopped. Mine care and maintenance through Deloitte and Touche receivership now employs 40 to 50 people seasonally at the site, including local residents and First Nations from Ross River. An extensive final closure plan is in development (see [www.faromine.ca](http://www.faromine.ca)) with the final plan for mine closure reclamation scheduled for 2009.

A visitor today will turn in off the highway and encounter a town with pockets of development and permanent residences broken up by sections of uninhabited housing. Faroites are proud of the care they take in maintaining their town, and their pride shows in the local gardens, the general upkeep of inhabited buildings and in the local businesses that are found throughout the municipality.

Tourism, not mining, is the new focus of economic development. Even so, the mine remains an important employer with some full-time and some seasonal workers. When a

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<sup>1</sup> History of Faro located on the Town of Faro website <http://www.faroyukon.ca>

full-scale reclamation plan is put in place, the mine will likely once again become the largest employer in the community.

There is also a small, but resilient local business community, including a hardware store, a hotel, a real estate company, outdoor adventure companies, bed and breakfasts, a restaurant, and various art studios and stores.

Today, the town has one of the few K to 12 schools outside Whitehorse, as well as a Yukon College campus. The town also has a recreation facility, curling rink and numerous summer and winter festivals and events that take advantage of these facilities.

The arts community has blossomed in Faro in recent years, as artists have taken the opportunity offered by the town's natural setting and affordable housing to relocate. At the same time, many previously uninhabited homes have recently been purchased by people looking for a retirement home or second property. As a result, the community has had a lot of new people bringing new life and ideas to the town.

In many ways, Faro has already started its march towards sustainability, by choosing to develop a locally sustainable economy in an effort to attract new visitors and new investors. Faro is determined to be a fixture on the Yukon map for decades and centuries to come. The work has already begun, and with this sustainability plan, the community is taking the next important step.

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## **Faro Vision Statement**

“Faro will be an attractive, sustainable, economically viable united community”

### **Faro Values**

The community of Faro intends to develop a long-term community plan that sets out a realistic path for the town to remain a vibrant, viable community in the heart of the Yukon. By adhering to the following values, the town will develop a sustainability plan that addresses individual needs within the context of the broader community vision. While these values don't capture the specific interests of every resident, consultation indicates that the residents of Faro value:

***A strong community ethic that promotes collaboration and communication to provide a friendly and safe home for all residents.***

At its core, Faro is a community of very independent people who choose to live in a community and an environment that reflects the self-sufficiency of the residents. Balancing that strong sense of individuality is a strong commitment to one another and to the town. Through strong communication and open dialogue, all of the individual talents can be combined into a cohesive effort to better the community and to ensure its sustainability.

***The affordability and lifestyle of the community that attracts residents.***

In recent years, Faro has attracted new residents based on a healthy, affordable rural, lifestyle with many of the comforts of larger centres. When Faro residents consider sustainability, the continued affordability of this lifestyle is a key component for retaining the existing population, while continuing to attract new residents.

***The facilities and services that enhance the every day lives and strengthen the community.***

While Faro is a rural community, it is also blessed with an array of facilities and services that add value to everyday lives, from basic municipal services to recreational facilities. Maintaining these facilities and services is vital if Faro is going to be a vibrant community able to retain its youth and attract young families. These services and facilities also help residents live a healthy lifestyle.

***The spectacular natural environment that surrounds the community.***

Like most Yukon communities, Faro's identity is tied up in the natural landscape that surrounds it. The community itself literally blends into the geography. No matter where people are in Faro, they are always on the edge of wilderness. Most of the residents use

the surrounding area for recreation or work. To many, living in Faro is as much about the surrounding area as it is about the town site itself.

***An attractive community that appeals to residents and visitors.***

Faro is working hard to be a clean, tidy, well-maintained community. Tourists and other visitors who come to Faro enjoy the community for the same reason local residents do – it’s a town that shows its pride by caring for the town site and the surrounding area. Anyone arriving or staying in Faro can appreciate the natural and community-made beauty.

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## **Faro Goals**

Faro is committed to ensuring its future development will be guided by the values set out in this plan. Extending from those values are a series of goals that reflect the community's desire to attract new residents and visitors, while preserving the lifestyle currently enjoyed by all residents. Faro residents recognize and value the role played by government in maintaining the current lifestyle. However, they also feel strongly that by tapping into local knowledge, skills and assets of the individuals that live in the town, they can all work towards a sustainable future that reflects the local identity and values.

With that in mind, Faro has set out five basic goals that together help define their visions for a sustainable future. The Town of Faro will:

***Develop and maintain environmentally sustainable, affordable and appropriate community infrastructure that provides essential services to residents and enhances community lifestyles.***

This goal is related to the community values of “*The facilities and services that enhance the every day lives and strengthen the community.*” “*The affordability and lifestyle of the community that attracts residents.*” and “*The spectacular natural environment that surrounds the community*”.

In practical terms, this goal addresses the town's desire to strike a balance between maintaining and developing appropriate infrastructure and meeting the needs of its citizens in a cost-effective way. By adhering to this goal, the community will be ensuring that any public infrastructure investment is measured against long-term goals and environmental sustainability.

We will incorporate sustainability principles into all planning processes and consider the ICSP before the Municipality makes any major decisions. We will measure our success in meeting this goal in these ways:

- A decrease in energy required to run Municipal 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.

***Determine, explore and attract economic opportunities in the local region.***

This goal is related to the community values of “*The facilities and services that enhance the every day lives and strengthen the community.*” and “*The affordability and lifestyle of the community that attracts residents.*”

By working together to develop local sustainable economic activity, the community will take ownership of its economic future. Given the town's history and the past experience of being overly reliant on the economic decisions of those living far away, the

community feels very strongly that a sustainable future is one where the local residents help determine the economic activity that will take place in the town.

This goal can be measured by employment and population figures. 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 employment rate over the ten-year period 2006 to 2016.
- An increase in the number of business licences issued by the Town of Faro throughout the ten year period of 2006 to 2016

***Be a vibrant, growing community that attracts visitors and residents based on its wilderness location and high quality of life.***

This goal is related to the community values of “*The facilities and services that enhance the every day lives and strengthen the community.*” “*An attractive community that appeals to residents and visitors.*” and “*The spectacular natural environment that surrounds the community.*”

The Town of Faro wishes to attract visitors, retain the existing residents and attract new residents to keep the town vibrant and support existing and expanded services in the community. It is recognized that some of Faro’s greatest assets are the high quality of life that the community offers, and the spectacular wilderness around the community. These assets will be the focus in growing the community in a sustainable manner.

Although it is difficult to quantify what aspects of Faro attract visitors and residents, we can track population and visitors:

- An increase in population over the period of 2006 to 2016
- An increase in visitors to the Faro Visitor Reception Centre

***Strengthen the sense of collective responsibility and community that enhances all aspects of life in Faro.***

This goal is related to the community value of “*A strong community ethic that promotes collaboration and communication to provide a friendly and safe home for all residents*”.

The community of Faro benefits from a strong sense of community and a dedicated and active volunteer base. A large and diverse collection of community groups and events contribute to the community. Supporting each other and the community in these ways contributes to the community spirit and safety that is so important. Work will be done to enhance these assets even more in the future.

Although collective responsibility is difficult to measure, we can track community engagement and participation in these ways:

- An increase in the number of town hall meetings and community forums and an increase in the number of residents attending each meeting
- An increase in the number of volunteers involved in community events

***Focus on community beautification to increase the quality of life in Faro, and attract new residents and visitors.***

This goal is related to the community value of “*An attractive community that appeals to residents and visitors.*”

Faro’s natural setting sets a high standard for the town to meet in terms of community beautification. Making the town a more picturesque place to live and visit will continue to be a priority. Beautification is recognized as a worthwhile investment, which will pay dividends for the community into the future.

The measure of success for this goal is:

- A decrease in the number of unused buildings in the community over the period of 2006 to 2016

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## 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 the community and of society in general.

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

There are limits on the ability of nature to provide these necessities; and too often nature is damaged beyond its capacity to renew itself. To be truly sustainable today and in the future, society must re-learn how to exist within the natural cycles of the planet. The damage that is done to nature can be divided into three categories:

- **Increasing Accumulations of Substances Extracted From the Earth**

Many substances that are extracted from the earth such as oil, gas, metals and minerals, contribute to the lifestyle enjoyed 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 the wildlife.

In practical terms, recycling and reuse of these materials should be increased and dependence on fossil fuels should be reduced.

- **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 are produced and dispersed into nature. These manmade compounds take 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 alternatives.

- **Physical Degradation of Nature**

Many of the needs as a society are met from renewable resources. This includes harvesting fish and other animals for food, and harvesting trees for the manufacture of wood and paper products. Continuing to use these resources, must be done at a rate and method 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.

## **Faro's Sustainability Principles**

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

While planning for the future, Faro will use these sustainability principles to help guide decisions.

Based on The Natural Step sustainability principles, the community sustainability objectives will strive to:

*Minimize and eventually eliminate our contribution to the accumulation of substances extracted from the earth.*

*Minimize and eventually eliminate our contribution to the accumulation of substances produced by society.*

*Minimize and eventually eliminate our contribution to the physical degradation of nature.*

*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.*

## Faro Community Goals

### Current Reality and Description of Success

As part of sustainability planning, it is important to recognize and document where Faro is today in terms of the community goals that have been established. This “**current reality**” will help identify where to focus efforts to realize the goals, and will help measure the progress made while moving towards sustainability.

It is even more important to have a clear idea of what exactly Faro wants to achieve. What will the community look like if goals are successfully reached? This “**description of success**” will ensure a defined idea of what Faro is hoping to become, and will serve as the destination, as the road map to sustainability is developed.

***Goal – Develop and maintain environmentally sustainable, affordable and appropriate community infrastructure that provides essential services to residents and enhances community lifestyles.***

#### **Current Reality:**

The state of Faro’s infrastructure is one of the community’s greatest challenges as it works towards a sustainable future. The town was built for a much larger population and without sufficient attention to long-term outlook of the community.

The issues include the aging water and sewer infrastructure, which includes wood stave, asbestos concrete and polyethylene (PE) pipes. The current funding model for municipalities discourages the decommissioning of any unused buildings. The aging distribution system is also heavily taxed by high water usage, although efforts in recent years have been undertaken to repair system leaks and control bleeding.

The town also has a footprint that far exceeds the needs of its current population. With a four-cell lagoon and three full benches of development, there is enough of an infrastructure base to support a town well above Faro’s current population of about 400. Already expensive operational costs are driven higher by the fact that much of the technology used is older and costly to maintain and repair.

The town has a gym, curling rink, arena, lounge, weight room, summer pool, squash courts, and meeting rooms. With these benefits come heavy costs associated with staffing and maintaining the facilities. Energy and heating costs are quite high, partly due to Faro’s rural remote setting.

The town roads are predominantly BST, with about 20 per cent paved and a further 10 per cent gravel. The landfill has about 20 years remaining on its lifecycle; there is limited recycling, waste oil and hazardous waste collection. Personal composting is done, but there is no municipal facility.

Overall, Faro is burdened with an overabundance of infrastructure, many of it aging and beyond its normal lifecycle. Addressing these issues will be the key to Faro's efforts to create a sustainable future.

**Description of Success:**

The description of success is relatively simple to state and difficult to achieve. The town is determined to reach a state where the infrastructure is appropriate to the population, without undermining the community's viability.

A sustainable Faro will be a town where 100% of all energy used will be renewable, municipal buildings will be energy efficient and meet or exceed current green standards and all residents will benefit from these efforts.

By addressing the dated components of the water and sewer systems the town will; control the water distribution and contain effluent waste in the sewer system.

The town will have zero net waste by increasing efforts to divert recyclables and compost; while working to reduce overall consumption.

In addition, the town will have a safe, active transportation system around and throughout the community by providing residents with more options for non – motorized transportation while enhancing opportunities for all to improve their healthy lifestyle.

Efforts will be undertaken in a way that ensures the town does not expand its current footprint to negatively impact the surrounding wilderness.

**Goal – *Determine, explore and attract economic opportunities in the local region.***

**Current Reality:**

Faro is a very different place than the mine town it started out as. Residents today are just as likely to be artisans or government workers as they are to work at a mine site. Most government employees work for the Town of Faro or for the Yukon government. However, there are also federal and Ross River Dena Council employees. Even with the local mine shut down, it still provides 40 to 50 summer jobs and between 12 to 15 winter jobs related to care and maintenance.

In recent years artisans and B&B's have increased the small business sector joining the more traditional businesses in Faro. These include the hotel, restaurant, retail establishments and construction businesses. The only gas station in town recently burned down, creating a significant void. However, the town anticipates a new facility in the community in the near future.

Tourism jobs make up the rest of the core business community. Tourism opportunities are growing, as Faro continues to market itself and the surrounding area as a vibrant wilderness vacation spot. Additionally, attractions such as the Golf Course, Interpretive Centre, RV Park and Campground provide opportunities right in town.

The community demographics have changed in recent years. Affordable housing and lifestyle have attracted new residents. More retirees and seasonal residents now live alongside long time locals.

Among the challenges faced by the community is the loss of money to Whitehorse, as residents, tourists and businesses continue to look to the bigger centre for basic necessities and supplies.

**Description of Success:**

Faro will have a sustainable economy.

Faro residents and businesses will have the opportunity to purchase basic needs and services in town.

The reclamation of the mine plays a role in the economic sustainability of the town without the boom-bust cycles. A long-term reclamation plan benefits the community with employment and increased spending in town by residents and companies working at the site. The reclamation efforts have created training for local youth and others and provided opportunities for more experienced workers.

Faro has a regular regional transportation system to bring people and goods into and out of town. Reliable communications and power infrastructure is in place. High-speed internet and cell service are reliable.

Efforts made in the area of economic development are carried out in a way that is respectful of the wilderness environment.

The various orders of government have coordinated economic planning activities; including complimentary local, regional and territory-wide plans.

The town benefits from a diverse locally based economy that is prepared for any large-scale opportunities that come along without being overly dependent on those larger projects.

**Goal – *Be a vibrant, growing community that attracts visitors and residents based on its wilderness location and high quality of life.***

**Current Reality:**

Faro is a town of about 400 residents, and its population is holding steady. There have been significant housing sales in recent years, mostly to people attracted by the affordable prices and stunning wilderness surroundings.

The town struggles to be understood by the territorial government. It strives to build a strong relationship around a mutual agreement that Faro represents a significant tourism and investment opportunity.

Tourism is currently a summer-based industry with limited winter tourism. One of the major tourism initiatives available to the town is the promotion of the Dena Cho Trail route through central Yukon, which was developed in partnership with the Ross River Dena Council. The trail marketing agreement is incomplete and as a result, there are limited benefits to Faro businesses.

Tourism is also limited by the town's distance from the only major airport in the territory.

Faro suffers from economic leakage, as much of the money earned by Faroites is spent in Whitehorse at major outlets and "big box" stores. As a result, Faro's economy suffers.

Recently, the town has lost its only gas station and food store. North 60 Petro has been delivering fuel to individuals and it is hoped that a permanent gas station will soon be in place again. The local hardware store is bringing in some food items and to meet immediate needs, and residents have established a Buyer's Club.

The town has an aging population. It is a safe, friendly community that could attract younger families in the future.

**Description of Success:**

In a sustainable Faro, the population will steadily increase, bringing diversity and stability to the town. With the increased population will come increased economic opportunities through the development of a collaborative and cooperative business community.

Tourism will be a year-round economic engine due to the effective, cooperative marketing efforts of Faro, tourism operators and the Yukon Government. Wilderness and wildlife are at the heart of the expanding tourism base. All governments put a greater emphasis on a more regional approach to all planning and development initiatives. Faro is working more closely on a regional basis with Ross River Dena Council and others.

As a direct result of the expanded population and economic base, more necessary services are available in town. Reliable, regular air transportation between Faro and Whitehorse is in place.

**Goal – *Strengthen the sense of community and collective responsibility that enhances all aspects of life in Faro.***

**Current Reality:**

The strong local community is one of Faro’s greatest assets. There is a widespread sense of community responsibility and very strong participation in most meetings and events, as demonstrated by the heavy participation in this planning process. Even so, there remain challenges in getting all residents to “buy in” to community decisions.

Faro is home to events such as the Crane and Sheep Festival and the golf and baseball tournaments. Smaller events, such as Fireweed Festival, Church Ladies Tea, community potlucks and dinners, as well as other events hosted by community groups, are initiatives that bring residents together. Faro has a strong community spring planting initiative and a community clean-up. As with many towns, there is a tendency for many of the same people to do the work associated with community events and, as such, volunteer burn out is always a concern.

As a safe community with a low crime rate, Faro is a great home for families. One area where the community faces challenges is in youth engagement and retention.

**Description of Success:**

A sustainable, vibrant Faro will have a strong volunteer base dedicated to maintaining and improving the strong sense of community. Youth will be integrated into the community, and they will play a larger role, both as participants and beneficiaries, in public events.

Residents are engaged and play a strong role in planning for the future, including economic development and land planning. Residents are informed through expanded participation in community groups.

Events and community groups are within the economic means of all residents without placing an unrealistic burden on the municipality.

Residents have regular access to the MLA and a strong communication link to the territorial government through that representative.

A strong commitment to a healthy lifestyle utilizes the existing recreation facilities to their fullest.

**Goal – Focus on community beautification to increase the quality of life in Faro, and attract new residents and visitors.**

**Current Reality:**

Faro makes a good first impression. Those visiting drive through or fly over a gorgeous landscape full of wildlife. Entering town, the visitors and residents will see a municipal building that is well maintained and attractive. Spring and summer visitors will encounter the fruits of the community planting initiative.

A large “green space” feeling is created by the golf course. The town is always clean and tidy. Faro has a beautiful RV park in a natural setting. Two municipal greenhouses add to the beautification efforts of the town.

Challenges in this area are many derelict, uninhabited buildings that create the appearance of a struggling town. Some of the old residences are boarded up with unkempt yards; the camp, hotel and other derelict buildings in turn, create a negative impression.

Work in recent years has helped the situation with improvements to public buildings and the removal of many older trailers and buildings. New owners spruce up formerly uninhabited homes inspiring others to do likewise. Combined with the efforts of residents in maintaining their own homes, the town does create an overall positive impression.

**Description of Success:**

A sustainable Faro is a place where community beautification is at the heart of planning.

Buildings are upgraded and inhabited, or torn down and replaced with new housing stock. Some buildings have been removed and green space will be left in their place creating public spaces. Municipal buildings will be upgraded where required and are more attractive.

Faro has wildlife and wilderness viewing areas. Parks and community spaces are attractive and utilized. Attractive native vegetation provides a strong link between the town and the surrounding landscape. A community greenhouse relies on local planting efforts.

An ongoing effort to continually beautify the town fosters a strong sense of community and acts as a catalyst for economic activities.

## Community Evaluation

### Faro Baseline Sustainability Analysis

Based on The Natural Step sustainability principles, Faro's sustainability objectives will strive to:

*Minimize and eventually eliminate our contribution to the accumulation of substances extracted from the earth.*

*Minimize and eventually eliminate our contribution to the accumulation of substances produced by society.*

*Minimize and eventually eliminate our contribution to the physical degradation of nature.*

*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. Some of the ways that are currently in contravention of the sustainability objectives in these areas have been identified, and some of the current positive practices that can be used as building blocks have been documented.

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**

Deterioration is at the heart of Faro's water infrastructure problems. The water and sewer infrastructure is still composed of old pipes made of asbestos/concrete, iron/steel, and fossil fuel based polyethylene (PE). Asbestos could represent risks to the environment; iron/steel and PE components represent materials extracted from the earth's crust. Lead used in some of the solder found across the system presents health and other sustainability risks.

The age and deterioration of the infrastructure creates challenges associated with maintaining the system. The money invested in the system impacts the ability of the community, as a whole, to meet its needs, because funds that could otherwise be invested in other areas are diverted towards maintaining the infrastructure.

Historically, Faro has been one of the heaviest per capital water consumers in the country. Water loss causes excessive waste of treated water through the system. This in turn adds to the increased costs in production and distribution.

Persistent leaks occur across the system. This could result in flooded homes which limit the ability of residents to meet their own needs, in terms of having safe, healthy shelter. The community is negatively impacted by erosion which leads to damaged roads and subsequent delays and costs.

Faro has only one supply line from its water source. A failure in this line would be a catastrophic event for the community.

Chlorine and its use also present sustainability challenges, as does the presence of hazardous wastes that get caught in the sewer system. The current status of these issues makes them challenges to sustainability.

### **Positive Building Blocks**

Despite the challenges, Faro has been able to take steps towards a sustainable future by focusing on areas where changes can be made without huge system overhauls. The town has invested in high-efficiency pumps to reduce electrical consumption. Buildings and homes have controlled bleeding. Low-flow toilets and showerheads have been installed in some buildings. There have been system improvements including pipe replacement. These pipes have either been recycled or re-used in other applications.

### **Priorities**

- Upgrade or replace underground infrastructure.
- Improve system design.
- Reduce water consumption through increased public education on conservation benefits and techniques.
- Protection of water source and supply.
- Eliminate hazardous waste in sewage system.

### **Focus Area – *Energy***

#### **Identified Challenges**

Energy use across the North is a significant sustainability challenge. Many of the challenges faced by Faro are tied directly to its rural, relatively isolated location.

Fossil fuels transported from down south are used for the vast majority of heating in public and private buildings.

There are sustainability impacts from the energy grid. Construction of major power line projects may reduce diesel uses in some areas, but the construction projects themselves carry their own sustainability challenges associated with energy use. From the public grid phase and into private homes, the wiring used is constructed of mined materials. Mercury is used in some lights. Heavy oil is used in transformers.

Chemicals are often used to clean heaters and other common energy consuming appliances. Heating systems may use chemicals, such as glycol, for general operation.

One of the biggest energy challenges is cost of heating and electricity. This plus the operation of inefficient appliances and heating systems has a significant impact on a family's ability to meet needs.

### **Positive Building Blocks**

The Town of Faro has taken some significant steps to reduce energy consumption and is considering others. The town utilizes waste heat from some municipal infrastructure. Heat generated by the Waste Oil burner helps heat the shop. Solar panels are in use at the landfill site and for the flow meter at the sewer Forcemain. Preliminary studies have been taken into the use of wind power to aerate the sewage lagoon.

### **Priorities**

- Invest in energy efficient upgrades to municipal buildings, such as insulating, cladding and re-roofing of the recreation centre.
- Replace the dated, inefficient ice plant and include waste heat recovery.
- Invest in feasible, realistic renewable energy systems, such as wind power for aerating the lagoon.
- Require LEED certified construction on new municipal facilities and buildings.
- Undertake energy review of existing municipal facilities and implement efficiencies where appropriate
- Investigate potential for biomass district heating system

### **Focus Area – *Solid Waste***

#### **Identified Challenges**

Solid waste disposal facilities are currently a necessary component of municipal life.

Residents, visitors and industrial users sometimes inappropriately use the landfill for disposal of hazardous wastes, oil, batteries and other items. Compost, plastics and other materials that could otherwise be recycled often end up in the landfill.

As a long-term negative impact, there is potential for ground water and soil contamination through leaching and surface water runoff. Monitoring and potential treatment for contamination can be very expensive and can lead to a diversion of municipal funds from other areas. Periodic burning at the landfill negatively impacts air quality.

Faro has many older, uninhabited homes and buildings and there is a significant challenge associated with the demolition and disposal of the materials.

### **Positive Building Blocks**

Faro has taken some steps towards making real improvements in this area. There is a limited recycling program in place that includes refundables and non-refundables. There are programs aimed at diverting tires, batteries, construction materials and metals from the landfill. Annual investment in landfill maintenance helps reduce negative impacts from solid waste, as does the recycling and reuse of older buildings.

### **Priorities**

- Public education program on waste diversion and recycling.
- Implement a hazardous waste collection program.
- Lobby Yukon Government to subsidize recycling program.
- Increase waste diversion through composting and other methods.
- Consider potential for Faro to become a transfer station, eliminating the landfill and burning.
- Install and maintain monitoring stations around landfill.

### **Focus Area – *Transportation***

#### **Identified Challenges**

Faroites might do more damage to sustainability principles through transportation than through any other single area. Government and resident vehicles consume large quantities of fossil fuels. The vehicles themselves are constructed of extracted materials, and some components are made from materials that pollute the environment, such as the chemicals in batteries. Roads and trails built throughout the Faro area directly impact the natural environment and provide easy access to previously pristine regions.

Secondary impacts include materials used to construct and maintain the roads. Heavy oil forms a large component of BST roads, of which most of the Faro roads are made. Paint used on roads and signage, and salt and other chemicals used to maintain Yukon roads in winter all contribute to an unsustainable facet of rural community life.

The relatively large footprint of the town means that most residents use a vehicle. Active transportation routes are underutilized discouraging an active lifestyle which is less dependent on motorized vehicles.

Faro is a community heavily reliant on vehicle travel and transported goods which affects residents ability to afford fuel and goods brought in from outside.

In Faro, many of these challenges are exacerbated by the long distance to a major centre. Any product shipped to Faro has travelled hundreds of kilometres, at a minimum, and likely thousands of kilometres from a major southern centre.

### **Positive Building Blocks**

Recognizing the challenges to sustainability that transportation presents, Faro and its residents have taken some steps to reduce the impact of vehicles. The Town has made initial investments in some active transportation routes, and where possible has invested in more efficient vehicles, such as golf carts for the Town's public works department.

The Town of Faro does not use salt or chemicals for winter roads. The municipality has a vehicle maintenance program that reduces impacts from inefficient running of vehicles.

One big positive is the Waste Oil Burner which provides heat for the town shop. Previously, waste oil from municipal and public vehicles was disposed of at a cost to the municipality. The town in partnership with YG has a tire-recycling program.

### **Priorities**

- General steps to reduce day-to-day impacts of driving, such as reduced idling, investing in more efficient vehicles and recycling of any sold off vehicle assets.
- Replacement of underground services, so that funds can be invested in areas more directly related to transportation.
- Maintain a central downtown core, reducing the need for driving.
- Work to reduce dependence on shipped goods
- Creation of a regional transportation network.

## **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**

*Public Education Initiative:* A public education initiative designed to create awareness of basic sustainability issues and to provide residents with specific knowledge about recycling, anti-idling, waste diversion, energy conservation and other initiatives that can have major positive impacts in all four focus areas.

*Develop a Long-term Underground Infrastructure Plan:* For Faro to make significant steps toward real sustainability, the Town needs to develop a detailed, realistic infrastructure redevelopment plan. The plan should include details related to material use, system reduction (if possible) and efficiency upgrades aimed at cost reductions.

*Energy Upgrades to Existing Municipal Buildings:* The Town can realize immediate energy efficiency benefits and reduce operational costs by making energy upgrades to existing buildings. By installing more efficient lighting, increased insulation and programmable thermostats, the municipality will be able to take a step towards sustainability without significant investment.

*Solid Waste Plan - Institute hazardous waste collection, composting and increased waste diversion program and facilities:* As one of the first steps towards sustainability, a large-scale waste diversion program that includes composting, hazardous waste collection and waste diversion through recycling is required. The Town needs to develop a realistic plan and invest in new facilities to carry out the tasks.

*Active Transportation Routes:* Enhancement of options for travelling in and around the community will reduce the need for residents to be dependent on vehicles. As a result, fuel consumption, emissions and road use will decline. As an added benefit, the municipality will be investing in a healthy, active lifestyle for residents.

### **Medium Term**

*Implement Long-term Underground Infrastructure Plan:* (medium/long term) The implementation of the underground infrastructure plan is a medium and long term priority as it is expected that the plan will be implemented over a significant time period. The implementation should result in more efficient use of natural and economic capital.

Water Supply Protection: Protecting the town's water supply is a key component of municipal responsibility. To do that, Faro will invest in a backup water supply line.

Upgrades to Recreation Centre (General): Recreation facilities are vital components of any community, but they are also some of the most expensive and energy intensive buildings to operate and maintain. Faro's facility is aging, but serviceable. In order to extend its life and improve efficiency, the town will invest in insulation upgrades, a new air exchange system and re-roofing of the facility.

Upgrades to Recreation Centre (Ice Plant): Ice plants are important for any recreational facility, as they extend the usefulness of the rink into warmer shoulder seasons. Replacement of the old ice plant will reduce direct operation and maintenance costs, and capitalize on waste-heat opportunities.

Landfill Monitoring Stations: One of the biggest risks associated with landfills is groundwater and/or soil contamination through leaching or surface water runoff. To ensure that any issues are caught early and addressed, Faro will invest in monitoring stations around the landfill, reducing the likelihood of undetected large-scale contamination and the associated liability and clean up costs.

Develop a Road Upgrade and Replacement Plan: Faro will investigate options for upgrading and replacing roads in and around the community.

Regional public transportation: (medium/long term) Yukon communities often face challenges associated with transportation for residents between distant locales. To reduce single-use vehicle trips and to improve links between communities, Faro will work towards a regional transportation system with other like-minded communities and other levels of government.

### **Long Term**

Biomass District Heating System: Heating represents one of the largest fossil fuel usages in Faro. It also represents one of the highest expenses faced by residents, and as such, is a significant barrier to all residents meeting their needs in a positive, sustainable way. To address this double-barrelled challenge, Faro will appropriately plan and invest in a community-scale biomass district heating system to provide heat to public and private buildings, thereby significantly reducing fuel usage and costs.

## Community Inventory and Assessment Checklists: Capital Project Infrastructure Inventory and Assessment

<b>Capital Project/Infrastructure</b>	<b>Do you have it? Yes/No</b>	<b>What is the condition? Good/Avg/Poor</b>	<b>Is there enough? Yes/No</b>	<b>Do you need it? Yes/No</b>
<b>City Hall</b>	Yes	Good	Yes	Yes
<b>Airport</b>	Yes	Average	No	Yes
<b>Community buildings</b>	Yes	Below Average	Yes	Yes
<b>Community Hall</b>	Yes	Poor	No	Yes
<b>Dock facilities</b>	No	N/A	N/A	No
<b>Community energy systems</b>	Yes	Below Average	No	Yes
<b>Fire station</b>	Yes	Poor	No	Yes
<b>Health clinic</b>	Yes	Average	Yes	Yes
<b>Housing</b>	Yes	Poor	No	Yes
<b>Internet service</b>	Yes	Average	No	Yes
<b>Library</b>	Yes	Average	Yes	Yes
<b>Police building</b>	Yes	Good	Yes	Yes
<b>Post office</b>	Yes	Average	Yes	Yes
<b>Recreation (parks)</b>	Yes	Poor	Yes	Yes
<b>Roads</b>	Yes	Poor	Yes	Yes
<b>Schools</b>	Yes	Poor	Yes	Yes
<b>Sewage collection and disposal</b>	Yes	Poor	Yes	Yes
<b>Solid waste disposal</b>	Yes	Poor	No	Yes
<b>Water service</b>	Yes	Average	Yes	Yes
<b>Public transportation</b>	No		No	Yes
<b>Active transportation</b>	No		No	Yes
<b>Youth centre</b>	Yes	Poor	No	Yes
<b>Other (daycare)</b>	Yes	Poor	No	Yes
<b>Other (churches)</b>	Yes	Poor	Yes	Yes
<b>Other (boat launch facilities)</b>	Yes	Good	Yes	Yes
<b>Other (swimming dock)</b>	No	N/A	N/A	Yes

## 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
<b>Health</b>	<b>Nutrition</b>	Some	Yes
	<b>Weight loss</b>	No	Yes
	<b>Aids prevention</b>	Some	Yes
	<b>Substance abuse</b>	Some	Yes
	<b>Family planning</b>	Some	Yes
<b>Public Safety</b>	<b>Police protection</b>	Yes	Yes
	<b>Fire protection</b>	Yes	Yes
	<b>Emergency response</b>	Yes	Yes
	<b>Search and rescue</b>	Yes	Yes
<b>Recreation Programs</b>	<b>Small children</b>	Yes	Yes
	<b>Teens</b>	Yes	Yes
	<b>Adults</b>	Yes	Yes
<b>Social Service Programs</b>	<b>Child care</b>	Yes	Yes
	<b>Domestic violence</b>	Yes	Yes
	<b>Seniors</b>	Yes	Yes
	<b>Disability services</b>	Yes	Yes
	<b>Counselling – adults</b>	Yes	Yes
	<b>Counselling – teens</b>	Yes	Yes
	<b>Legal services</b>	N/A	N/A
	<b>Suicide prevention</b>	Yes	Yes
<b>Self Government</b>	<b>Self government status</b>	N/A	N/A
<b>Cultural Programs</b>	<b>Elders group</b>	N/A	N/A
	<b>Music</b>	N/A	N/A
	<b>Subsistence food preparation</b>	N/A	N/A
	<b>Dance group</b>	N/A	N/A
	<b>Arts and crafts</b>	N/A	N/A
	<b>Language programs</b>	N/A	N/A
	<b>Spirit camps</b>	N/A	N/A
	<b>Storytelling</b>	N/A	N/A
	<b>Other (churches)</b>	Yes	Yes
	<b>Clothing Exchange</b>	Yes	Yes

## 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	20	Yes	5 yr round	15	
CAO	1	Yes	Yes		
Accounting officer	1	Yes	Yes		
Environmental specialist	2	Yes	1	No	
Logger/Forester	0	No			
Health aide/Nurse	5	Yes	3		
Heavy equipment operator	16	Yes	8	some	\$26 - \$28
Mechanic	3	Yes -1 No - 2	2, 1 casual	No	\$29
Construction	12	Yes	8	No	\$26- \$28
Housing manager	2	Yes	No	No	\$22
Public safety officer	0				
Fire fighters	10	Yes	Part-time	No	volunteer
Emergency response	10	Yes	Part-time	No	volunteer
Business owners	25	Yes	9	No	range
Counselor	1	No	Part-time	No	
Water treatment operator	5	Yes	Part-time	No	
Sewage treatment operator	5	Yes	Part-time	No	
Landfill operator	5	Yes	Part-time	No	
Power plant operator	2	Yes	1	No	
RCMP	2	Yes	Yes	No	
Doctor	1	No	Part-time		
Teachers	10	Yes	8	No	
Territorial Office (liquor store, driver's services)	2	Yes	Yes	No	
Post Office	3	Yes	2	No	\$14 - \$22
Electrician	0				
Hairdresser	0				
Lifeguard	0				
Dentist	0				
Clergymen	2	Yes	Yes		

## Community Inventory and Assessment Checklists: Environmental Inventory and Assessment

<b>Environmental Assets/Needs</b>	<b>Do you have it? Yes/No</b>	<b>If this is lacking, does your community need it? Yes/No</b>
Safe drinking water	Yes - chlorinated	
Adequate supply of water	Yes – 3 wells	
Certified water treatment operators	Yes - 6	
Safe sewage disposal and treatment	Yes – lagoon + pipeline	
Permitted landfill	Yes	
Recycling program	Starting up	Yes
Used oil storage area	Yes (Shop and recycling yard)	
Lead acid battery collection area	Yes (recycling yard)	
Developable land	Yes (adjacent to '81 subdivision)	
Fuel spill prevention plan	Yes	
Hazardous waste response plan	No, but regulations in place on where and how to ship it)	
Erosion control	Yes – storm drains	
Contaminated sites identified	Yes	Clean up required
Healthy subsistence food	Yes – moose and caribou	
Environmental Education programs	Hunter education	
Healthy wildlife populations	Yes	
Hazardous waste collection area	No	
Protected watershed plan	Yes, Van Gorda Creek (Deloitte and Touche)	
Environmental impact statement	Yes (in OCP)	
Solid Waste Management Plan (????OCP mentioned)	Yes	

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

<b>Capacity Building/ Training/Education Opportunities Category</b>	<b>Type</b>	<b>Does this job exist in the Community?  Yes/No</b>	<b>Training/education needed?  Yes/No</b>	<b>Is training available in the Community?  Yes/No</b>
<b>Municipal or First Nation Administrative Positions</b>	<b>CAO</b>	Yes	Yes	No
	<b>Accounting Officer</b>	Yes	Yes	No
	<b>Community Development Officer</b>	Yes	Yes	No
	<b>Office Manager</b>	Yes	Yes	No
	<b>Manager of Operations</b>	Yes	Yes	No
	<b>Recreational Programmer</b>	Yes	Yes	No
<b>Education</b>	<b>Principal</b>	Yes	Yes	No
	<b>Teachers</b>	Yes	Yes	No
	<b>Teacher aides</b>	Yes	Yes	No
<b>Health</b>	<b>Health aide</b>	No	N/A	N/A
	<b>Nurse practitioner</b>	Yes (2 fulltime, 1 relief shared with Ross River)	Yes	Some ongoing – CPR and various Life Support courses
	<b>Doctor</b>	Yes – currently vacant	Yes	No
<b>Transportation Utilities</b>	<b>Driver/pilot</b>	Yes	Yes	Ywa-mobile from Whitehorse
	<b>Water treatment operator</b>	Yes-6 only	Yes-constantly	No
	<b>Sewage treatment operator</b>	Yes-No Cert.	Yes-if legislated	No
	<b>Landfill operator</b>	Yes	Yes	No
	<b>Power plant operator</b>	Yukon Energy	N/A	N/A
	<b>Water delivery service operator</b>	N/A	N/A	N/A
<b>Justice</b>	<b>Notary Public</b>	2	Yes	In Yukon
	<b>Justice of the Peace</b>	2 being trained	No	In Yukon
<b>Other</b>	<b>Coroner</b>	1	Yes	In Yukon

*Community Inventory and Assessment Checklists: Inventory and Assessment of Other  
Items*

<b>Asset or Need</b>	<b>Do you have it? Yes/No</b>	<b>How would you rate it? Good/Avg/Poor</b>	<b>Do you need it? Yes/No</b>
Liability of derelict and abandoned buildings	<b>Yes</b>	<b>Poor</b>	<b>No</b>

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