

# *Taloyoak Community Plan and Zoning By-law Update*

## *Preliminary Background Report – September 2009*



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Appendix 1 – Existing Land Use Map

## 1 INTRODUCTION

The Background report is intended to summarize and analyze the background documentation on the community and to document the process undertaken by the consultants to update the Community Plan for the Hamlet of Taloyoak. Through this planning process, a new Zoning By-law will also be created to implement the policies of the Community Plan. In this regard, the Background Report provides a planning rationale for the creation of the Community Plan and Zoning By-law. The report is composed as follows:

- Section 1 Background information on the physical setting of Taloyoak, and a brief community history
- Section 2 A review of current and future community demographics
- Section 3 Existing conditions in the community
- Section 4 A review of major community facility and land needs, and a discussion of development constraints
- Section 5 A discussion of community growth options
- Section 6 A review of relevant documents supporting the planning process
- Section 7 Details on the public consultation approach and results
- Section 8 Bibliography of resources

### 1.1 COMMUNITY INFORMATION

#### 1.1.1 LOCATION

The community of Taloyoak is located on the shore of Stanners Harbour at the head of the St. Roch Basin on the west coast of the Boothia Peninsula. The community is situated at 69° 32' 13" N, 93° 31' 36" W within the Arctic Circle. The community lies approximately 460 km east of the Kitikmeot regional centre of Cambridge Bay, Nunavut and 1,224 km northeast of Yellowknife, Northwest Territories.

#### 1.1.2 GEOLOGY AND TERRAIN

According to the Aggregate Resources Evaluation produced by Nuna Burnside (2009: pp. 4-5):

*Bedrock in the Taloyoak area consists of magmatic and metamorphic rock types (gneiss and granite), and can be usually found at depths varying between 4 m to 13 m below the ground surface. The area is flanked on both sides by mostly carbonate, sedimentary bedrock. Bedrock outcrops are typically observed along deep river cuts.*

*Surficial geology in the Taloyoak area consists of glacial till and marine deposits, with scattered areas of bedrock outcrop. Glacial sediments within the Taloyoak area vary in thickness from 0.5 m to 13 m, mimicking the form of the underlying bedrock. The deposits consist of non-sorted clayey till with a sand content ranging from 30 percent to 40 percent, and silt content ranging from 30 percent to 40 percent. The glacial deposits also form low, short, and closely spaced moraine ridges.*

*A 1981 geotechnical investigation noted that "drumlins, eskers and bedrock hills in the region are commonly surrounded by very coarse marine beach deposits, all of which would be potential granular resources. An*

*abundant supply of borrow material is readily available in Taloyoak from a wave washed esker complex near the air strip. The esker deposits vary from poorly graded gravelly sand.”*

*Taloyoak is located within the continuous permafrost zone. The subsurface materials beneath a thin active layer are perennially frozen to a considerable depth. Permafrost features are widespread throughout the area, especially pattern ground and ice lensing. On average, an active layer 0.7 m to 1.2 m develops by the end of the summer months.*

### 1.1.3 CLIMATE

According to weather data collected by Environment Canada, in the recent five years (2004-2008), the extreme maximum and minimum temperatures recorded in Taloyoak have averaged 21.0°C and -44.7°C respectively. The warmest month is typically August, while the coldest months are typically January, February and March. The community receives approximately 104.8 mm of rain per year, with the greatest rainfalls in August. Total annual snowfall averages 141.5 cm, with the greatest snowfalls in October. Climate data from the previous five years is presented in Table 1 below.

**Table 1 - Climate data recorded at Taloyoak, Nunavut (Source: Environment Canada, 2009).**

Year	Mean Temp. (°C)	Mean Maximum (°C)	Mean Minimum (°C)	Extreme Max. (°C)	Extreme Min. (°C)	Rain (mm)	Snow (cm)	Total Precip. (mm)
2008	-14.0	-10.5	-17.4	21.1	-45.5	113.0	140.4	214.5
2007	-13.7	-9.9	-17.4	24.6	-42.6	105.0	143.9	198.5
2006	-11.5	-7.7	-15.3	21.5	-42.8	128.4	141.0	223.4
2005	-14.4	-10.4	-18.3	17.4	-46.0	96.4	122.5	209.2
2004	-16.9	-13.4	-20.4	20.5	-46.4	81.2	159.6	222.6
<b>Averages</b>	<b>-14.1</b>	<b>-10.4</b>	<b>-17.8</b>	<b>21.0</b>	<b>-44.7</b>	<b>104.8</b>	<b>141.5</b>	<b>213.6</b>

Figure 1 on the following page describes the meteorological conditions for the winter months (September through May) in Taloyoak for:

- Winds greater than 15 km/h;
- Winds greater than 15 km/h with snowfall; and,
- Blowing snow events.

The movement of drifting snow at low wind speeds is negligible. A threshold wind speed of 15 km/h was therefore used to determine the predominant winds that could be associated with snow movement on and around the study site. The 15 km/h wind speed is measured at the weather station’s anemometer, which is typically located on a mast approximately 10m above the ground. Winter winds with blowing snow represent higher wind speeds often associated with storm events and significant drifting.

Historical wind data recorded at the Taloyoak Airport for the period of 1984 through 2007 by Environment Canada were analysed to determine the wind directions that would most often be associated with drifting snow. The first analysis of winter winds greater than 15 km/h (see upper left wind rose) indicates that the northwest, south, north-northwest and northeast winds are most prevalent. The second analysis considered winds greater than 15 km/h with snowfall (see upper right wind rose). From these data it is apparent the south, northeast and east-

northeast winds are most prevalent. The third analysis considers blowing snow events (see lower wind rose), which indicates that northwest, north-northwest, northeast and east-northeast winds are prevalent. Winds from the northwest, northeast and south are considered the most important.

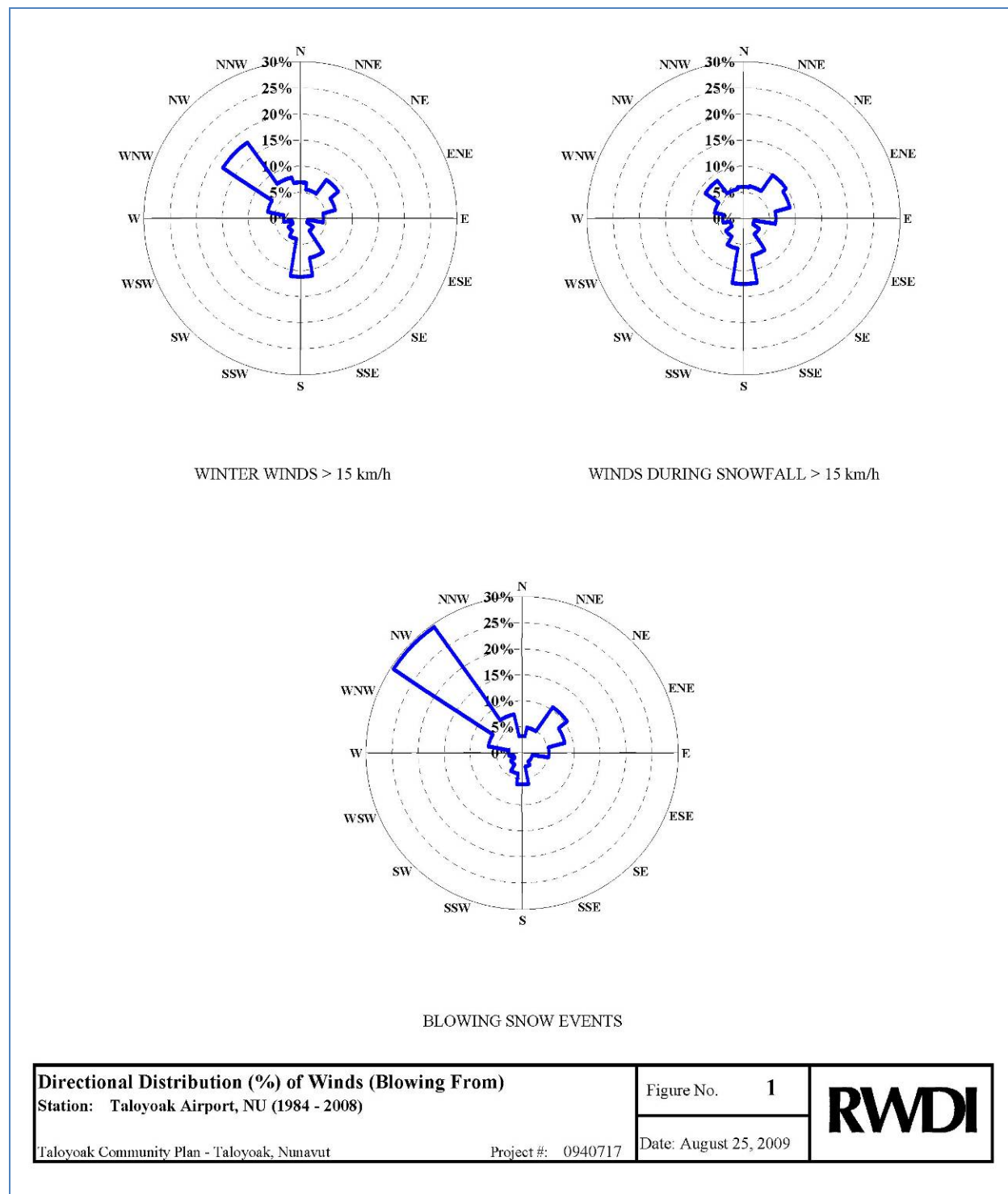


Figure 1 Directional distribution of winds at Taloyoak, Nunavut (Source data: Environment Canada, 2009).

#### 1.1.4 COMMUNITY HISTORY AND ARCHAEOLOGY

There is long-term evidence of human occupation in the Taloyoak area prior to settlement as a town. Tent rings and other archaeological artefacts can be found in the vicinity of the town, particularly near well-known hunting and fishing areas. The current name of the town, Taloyoak (pronounced talur-juaq in Kinngarmut and taluq-ruak in Nattlingmiutut) is derived from the low-stone walls constructed as caribou hunting blinds. Inuit people used to hide inside the circle of stones and wait for the caribou to pass by. When the caribou were near the hunter, the hunter would herd the caribou into the taluq and hunt them with spears and bow and arrow. The taluq is a well-known archaeological site, which should not be disturbed by future development. Other archaeological sites have been mapped by the Department of Culture, Language, Elders and Youth. The policies of the Community Plan will ensure that these sites are also protected from future development.

Settlement of the townsite, called Spence Bay until 1992, began in the 1940s with the arrival of the Hudson's Bay Company, the Royal Canadian Mounted Police (RCMP), and the Anglican and Roman Catholic churches. The original Hudson's Bay Company store was the clothing store. It was built in 1947 and first managed by John Stanners. The first HBC employee in the community was Ernie Lyall.

The Royal Canadian Mounted Police established their first detachment at Spence Bay in 1948. Two RCMP officers came to the community with an interpreter from Gjoa Haven. In addition to keeping the peace, the RCMP distributed welfare and family allowance to area families. The original Anglican Church was built in 1955. The original church was built near the current water lake, but was moved to the current site. The first Federal Day School was established in 1958. There were then 23 students at the school between the ages of 6 and 16. The building of the school meant that local children no longer needed to be sent to residential schools elsewhere.

In recent years, the population of Taloyoak has grown to nearly 900 people. The community has become well known for its artisans, who produce a trademark "packing doll", featuring a mother animal with a baby tucked into the traditional mother's amauti jacket. Other artisanal products include embroidered mittens and bags, as well as contemporary stone and animal carvings.

## 2 DEMOGRAPHIC INFORMATION

This section of the report reviews the current population structure and future population growth forecasts for the community. A forecast of future housing needs is also provided.

### 2.1 POPULATION GROWTH

Several communities in Nunavut have experienced rapid population growth in recent years; Taloyoak is no exception. Between the 2001 and 2006 Census years, the population of Taloyoak grew by 12.4% to 809 people. To account for typical census undercounting, the Nunavut Bureau of Statistics released postcensal population estimates for the years 1991 to 2007, which pegged the community population at 863 in 2006 and 887 in 2007. A base population as of 2007 for the purposes of this plan is therefore **887 people**.

On the whole, Nunavut has the highest fertility rate and the youngest population in Canada causing it to have the highest natural rate of increase in the country. This growth factor is muted somewhat by a relatively low life expectancy. As for net migration, the Nunavut Economic Forum, in their report entitled *Nunavut Economic*

*Outlook* (Nunavut Economic Forum, 2008), noted that recent trends show an overall negative migration away from the territory. Key factors that may influence the recent migration away from Nunavut include a scarcity of community-level economic opportunities, the high costs of living, and limited opportunities for advanced education. However, as the territory continues to mature, ongoing government and community efforts to boost economic activity and training opportunities are expected to make northern living more attractive.

Community level population projections prepared by the Government of Nunavut and observations of past Census population trends were considered to produce three possible population growth scenarios ranging from 2.2% to 2.6% average annual growth. The observations used to formulate these projections are as follows:

- The last 15 years of Census trends (1991-2006) suggested that the population of Taloyoak grew by approximately 2.24% per year.
- In 2000, the Nunavut Bureau of Statistics produced community-level population projections to the year 2020, which showed an average annual growth rate of approximately 2.41% per year.
- Observations of the last 16 years of postcensal population trends (1991-2007) suggested that the population of Taloyoak grew by approximately 2.49% per year.

For the purposes of the Community Plan the population projections are based on rates of **2.2% (LOW)**, **2.4% (MEDIUM)**, and **2.6% (HIGH)** average annual growth. It is recommended that the **MEDIUM projection of 1530 people** be adopted as the reference population for the purposes of the community plan. Monitoring of actual growth rates is however essential to ensure the appropriate timing of development phasing and the extent of infrastructure improvements. The projections are summarized in Table 2 and Figure 2.

Table 2 Population growth estimates for Taloyoak to 2030.

2007 Postcensal Population Estimate	Projection	Projected Population in 2030	Projected Population Growth to 2030
<b>887</b>	<b>LOW</b> 2.2% annually	<b>1463</b>	576
	<b>MEDIUM</b> 2.4% annually	<b>1530</b>	643
	<b>HIGH</b> 2.6% annually	<b>1601</b>	714



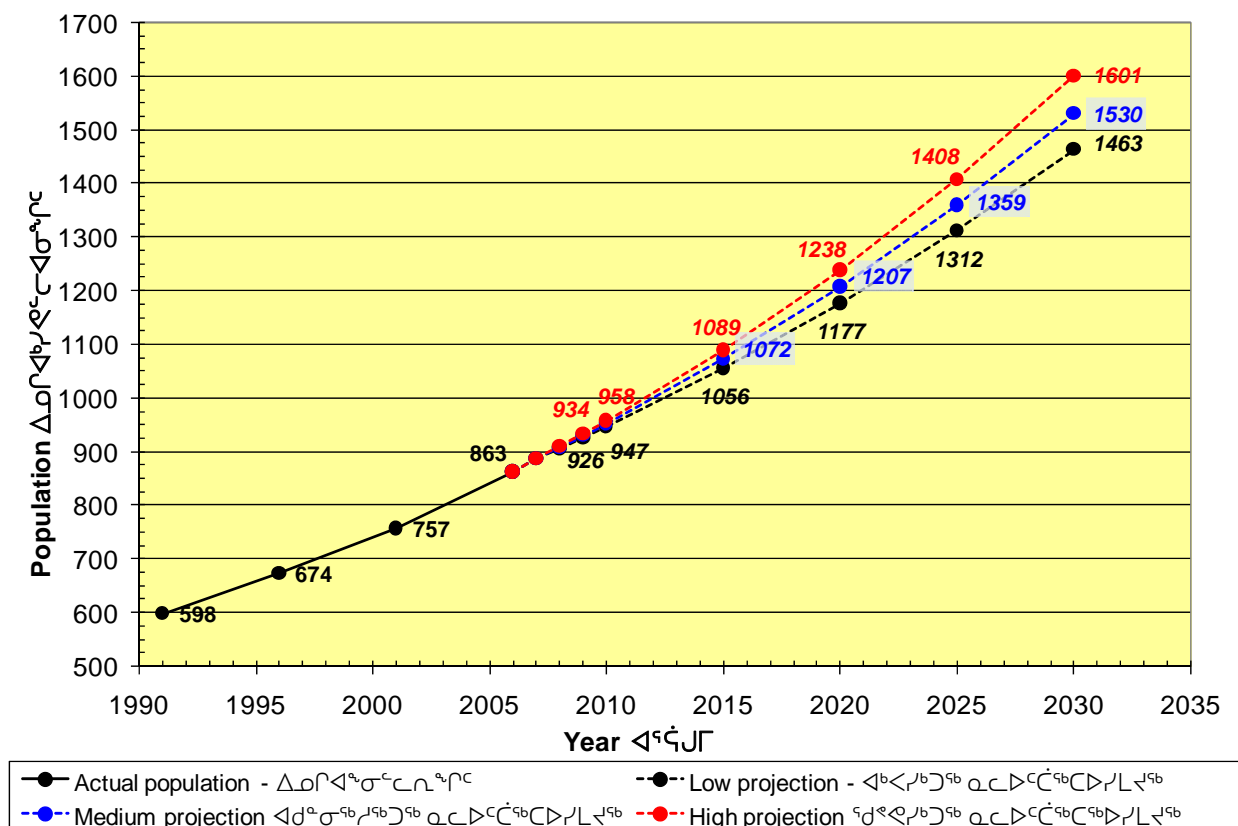


Figure 2 - Population growth scenarios for Taloyoak to 2030.

## 2.2 HOUSING GROWTH

According to the 2006 Census, there were 205 housing units in the community at the time. Since that time, the population is assumed to have grown to 930 people in 2009, according to the medium population growth scenario in Section 2.1 above. Assuming that housing growth has kept pace with population growth in these intervening years, it is assumed that the base number of housing units has increased by 15 units to an overall total of 221 units.

The 2006 Census revealed that the average household size in Taloyoak was 4.4 people, compared with average household sizes of 3.7 people in Nunavut and 2.5 people in Canada as a whole. The larger household sizes in Taloyoak compared with the Nunavut and Canadian averages may point to overcrowding conditions in many households. Anecdotal evidence from community consultations indicated that this is a likely scenario, with one community member reporting a household of 12 people. As the Nunavut Housing Corporation moves to alleviate housing shortages in the coming years, it is expected that the average household sizes in the community may drop nearer to the territorial average, which may itself drop closer to the Canadian average. For these reasons, the future community housing demands to 2030 are based on average household sizes of 3.5 people (Table 3).

Table 3 Projected housing needs to 2030, based on the Medium population projection (2.4% annual growth).

Projected Population in 2030	Projected Total Units by 2030	Current Supply of Housing Units	Projected Additional Housing Units to 2030	Average Annual Units to be Built
<b>1530</b>	<b>437</b>	<b>221</b>	<b>216</b>	<b>11</b>

The average housing density in the community is approximately 15 units per net hectare, including single detached, duplex and row dwellings. Due to the high costs of materials and labour, the compressed construction season, and the urgency of providing adequate housing, the Nunavut Housing Corporation is generally favouring attached housing forms such as duplex, triplex, and row dwellings, rather than single detached housing. The attached forms of housing are typically used to achieve higher residential densities than if all houses were constructed as single-detached units. It may be possible to introduce some low-rise apartment units as a new housing form in Taloyoak, or introduce some second storey residential uses in new commercial developments. However, increases in housing density must also be balanced against residents' needs for outdoor storage of vehicles and harvesting equipment, as well as adequate areas to practice artisanal activities (e.g. carving). Assuming a modest increase in the average residential density to 20 units/ha, the total residential land area required for 216 additional housing units would be approximately **10.8 hectares**.

### 3 EXISTING CONDITIONS

#### 3.1 EXISTING LAND USES

The Existing Land Use Map (Appendix 1) indicates the existing land uses in the community. The existing land use map attempts to display the land uses on both surveyed and sketch lots. The rough breakdown of land uses in the townsite is represented in Table 4. The Open Space areas in the table include only active recreation lands, such as the baseball diamond, and playgrounds.

Table 4 - Existing land use areas in Taloyoak

Land Use	Area (ha)	Percent
Residential (low and medium density)	10.8 ha	43%
Commercial	2.1 ha	8%
Public/Institutional	5.5 ha	22%
Open Space (active uses)	1.2 ha	5%
Industrial	3.5 ha	14%
Transportation and Communication	2.0 ha	8%
<b>Total</b>	<b>25.1 ha</b>	<b>100%</b>

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### 3.1.1 RESIDENTIAL

- Taloyoak is roughly divided into two functional halves by the creek system that runs in a general north-east to south-west direction. The older residential lots are located on the east side of the creek nearest the western shore of Stanners Harbour. The newest housing has been built to the west of the creek, radiating outward from the Disneyland Subdivision.
- Virtually all housing in the older part of town is in the form of single-detached dwellings. While some houses respect the established lot lines, other housing has been built in road allowances and on unsurveyed pieces of land. A unique feature of some housing development in this area is the creation of sketch lots that follow the building footprint, likely after the houses were constructed. The construction of houses in the road rights of way and on scattered sketch lots has resulted in narrow road widths, and a generally inefficient road pattern in this area. Some degree of remediation may be possible through the Community Plan update.
- In the western half, housing development has been somewhat more coordinated. Houses are generally built within the limits of their lots, although there are some instances of overlap into neighbouring lots and the road right of way. A more regular street pattern is established. Higher density housing forms, such as duplexes, triplexes and row dwellings (4-12 units) have been constructed, particularly in the most recent construction years. On the existing land use map, lots that have been developed with such forms of attached housing are identified as Medium Density Residential lots.

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### 3.1.2 COMMERCIAL

- Commercial land uses in Taloyoak are limited to the Co-op Store, Northern Store, Taluq Designs, IBC, and the Boothia Hotel. For the purposes of this Community Plan update, commercial uses are considered to be retail stores, offices, hotel accommodations and similar uses. While storage warehouses and garages are in some cases associated with commercial enterprises, they are more appropriately considered industrial uses.

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### 3.1.3 PUBLIC/INSTITUTIONAL

- Public/Institutional land uses are those which have government, civic and other institutional functions. These uses include the Hamlet office, recreation facilities, the health centre, school, daycare, RCMP, elders centre and the two churches.
- Most of the Public/Institutional land uses in Taloyoak are concentrated in the older area of town. Institutional functions to the west include the community hall and arena, health centre, and daycare.

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### 3.1.4 OPEN SPACE

- While the community is surrounded on all sides by open space, there are few functional active open spaces within the town site. Active open spaces include the baseball diamond and skateboard park behind the community hall, the swing set next to the school, and the toddlers playground at the south

end of the Disneyland Subdivision. The 3-hole golf course is located approximately 2 kilometres to the west of the Community Hall, along the airport road. The community plan process is a key opportunity to identify future sites for outdoor recreation.

- The community harbour also functions as open space; however this area requires some clean-up so that it may be used to its full potential.
- The creek system and the point forming the west side of Stanners Harbour provide some naturalized open spaces within the community.

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### **3.1.5 INDUSTRIAL**

- Industrial land uses include warehouses, outdoor storage, garages, workshops and energy installations (i.e. tank farm, power plant). These uses are concentrated near the tank farm; however some storage sites are located within the core area of town.
- Over time, it may be possible and desirable to move these industrial land uses (particularly warehousing and open storage) to locations outside the core area so that the land may be released for more active and community-oriented land uses. These new uses might include office space, new stores, housing and civic buildings.

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### **3.1.6 TRANSPORTATION AND COMMUNICATIONS**

- Transportation and communications uses include the marine sea-lift area and airport as well as communication antennas and aircraft navigational equipment.
- Within the built up area, there are three major communications sites: to the south of the tank farm, south of the school, and adjacent to the historic cemetery on the point.
- The airport's non-directional beacon (NDB) is located to the north of the tank farm. A 150 metre minimum development setback is required around the NDB.

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### **3.1.7 WASTE DISPOSAL**

- The community dump site and sewage treatment lagoon are located south of the current airport. An older, disused dump site is located between the town and the airport. All development near landfills and sewage lagoons must abide by the General Sanitation Regulations of the Public Health Act, which prohibit residential land uses, and commercial land uses involving the preparation of food within 450 m of the waste disposal site.
- An unofficial metal dumping site has become established on the road leading to the large gravel deposit behind the community and Canso Lake beyond. This metal dumping ground is improperly designed and if left to grow, may limit the kind of future growth that could otherwise occur in this area.

### **3.2 ECONOMIC DEVELOPMENT**

The local economy in Taloyoak is reasonably diverse considering its small size. One of the principal value-added industries in Taloyoak is the arts and crafts sector. Locally-based Taluq Designs is a subsidiary business of the Nunavut Development Corporation and is famous for a variety of sewn products such as the traditional packing dolls, kamiks, mittens and bags. There are also a number of local carvers who specialize in bone, stone and ivory to create traditional and spiritual Inuit images. Taloyoak is also one of the five communities in Nunavut hosting a branch of the Inuit Broadcasting Corporation (IBC), which is well-known for its Inuit programming and documentaries.

Traditional land- and sea-based activities include participation in the char fishery and limited caribou harvesting. The Hamlet of Taloyoak employs a number of people in administration, translation, municipal services and social services. Although there are no major GN departments situated in Taloyoak, there are some territorial jobs most notably in education, healthcare and wildlife monitoring.

The two major stores in town are the Paleajook Co-op and the Northern Store, which each employ about 15 people. Contracting and construction sectors are also represented in Taloyoak. First Air and Canadian North offer passenger and freight connections to neighbouring communities of Gjoa Haven, Kugaaruk and Cambridge Bay, and to Yellowknife, NWT. Limited tourism offerings include snowmobile tours of the region in winter and spring, and boating tours during the summer months.

Despite these promising initiatives, unemployment in Taloyoak was estimated at 28.1% in the 2006 Census. Future community vitality will be dependent on creating additional economic opportunities to reduce the unemployment rate.

### **3.3 TRANSPORTATION INFRASTRUCTURE**

Transportation is vital to the health and well-being of residents, as well as to future economic growth. Air and marine transportation systems are used to move goods and people between communities and over longer distances. Within communities, snowmobiles and all-terrain vehicles are the most popular means of transport, although cars and trucks are becoming more numerous.

#### **3.3.1 ROADS**

Taloyoak is equipped with an internal road system that nominally meets the needs of residents. However, there are a number of traveled roadways that do not follow surveyed road rights of way, and in fact cut across established development lots. This is particularly problematic in the older parts of town (e.g. the residential area near the community docks, and in the largely industrial area approaching the tank farm). The heavily-used community road leading from the centre of town to the Northern Store cuts diagonally across the Anglican Church site, and the site of the old Boothia Hotel. During public consultations, this road was identified as an area where snow drifting can be particularly problematic. Council has also identified a need to widen several of the roads in town, which are in some cases are currently passable for only one vehicle.

The town is physically divided into two main sections by a low-lying wet area, with one major road linking the two halves of town. While traffic volumes are not particularly large, many individuals also walk along this road at all times of the day. Consideration should therefore be given to widening this road and installing some form of protected pedestrian right of way. The road network in the western half of the community is generally good, and

reflects the somewhat more coordinated approach to development that has occurred in recent times. The realignment and widening of roads, particularly within the core area of town, is expected to facilitate the redevelopment of several obsolete buildings and make more efficient use of the existing community land base.

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### 3.3.2 MARINE FACILITIES

Marine transportation is provided by barge. Currently, barges use the beach area at the head of Stanners Harbour, across from the Hamlet garage. There is increasing evidence that the sealift area is too small to accommodate the increasing volumes of annual cargo. As there are limited additional lands in the vicinity to expand the sealift area, it will be important to establish a suitable place away from the shoreline for the storage of sea containers and other goods for extended periods of time. Over the long-term, the Hamlet garage may be relocated away from the shoreline, which would free up some lands for the enlargement of sea-lift activities.

In many respects, Taloyoak is fortunate to have a well-protected harbour, including a smaller embayment for local boats. The Hamlet has recently received a floating dock structure which will add to the functionality of the harbour. However, the full potential of the harbour is reduced by the presence of run-down shacks and buildings, and by assorted debris. The breakwater at the mouth of the community dock area may also need to be opened up to allow for more frequent refreshing of the waters behind it.

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### 3.3.3 AIR

Similar to all Nunavut communities, the only year-round passenger and cargo access is by air. There are no formal roads leading to other communities, therefore the community is totally reliant upon its airport for all essential services. First Air and Canadian North offer passenger and cargo services on a limited basis. The airstrip in Taloyoak is located approximately 2 kilometres to the northwest of the community.

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### 3.3.4 ACCESS TRAILS

There are a number of access trails in the vicinity of Taloyoak, which lead to well-known hunting and fishing areas such as Middle Lake and Netsilik Lake. Community members have expressed a desire to expand the range and quality of the access trails to open up additional hunting and fishing spots. The major access trail to Middle Lake traverses airport property and at one point comes close to the airstrip. During the consultations, realignment of this trail was identified as an issue requiring attention, particularly in respect of airport safety regulations.

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## 3.4 MUNICIPAL SERVICES AND INFRASTRUCTURE

Electrical services in Taloyoak are provided by Qulliq Energy Corporation, while the Hamlet currently contracts out municipal services such as water delivery, sewage pump-outs and waste disposal services.

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### 3.4.1 WATER

The current source of potable water for Taloyoak is a small lake situated to the north of the Northern Store. The current water supply lines run from the edge of the lake behind the Northern Store, across the lots of the Northern Store and the old Boothia Hotel to a truckfill station in the centre of town.

While the current water lake remains sufficient to supply the community for a few more years, the Government of Nunavut has identified a second lake (Canso Lake) to the north of the water lake as the future community water source. Preliminary engineering work has begun at Canso Lake. In addition to addressing the community's long term needs for water, Canso Lake is more distant from development activity, which will reduce the risk of contamination from sewage, oils and other substances.

Water treatment is limited to chlorination added at the truck fill station. Water is delivered to the end users by a truck water service 5 days a week, which is currently contracted to Lyall Construction.

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### 3.4.2 SEWAGE

Sewage is collected from the Hamlet's houses and other buildings by truck and is discharged into a sewage lagoon located adjacent to the airport. The sewage lagoon is reportedly in good condition and has sufficient capacity to meet the long term needs of the Hamlet. The lagoon includes a wetland treatment system which filters out most of the organic nutrients and contaminants prior to ultimate discharge in the ocean.

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### 3.4.3 SOLID WASTE

Solid waste is collected from the households and other buildings by a municipally-operated collection system and is disposed of at the Hamlet's solid waste facility. The current solid waste facility is located approximately 1 km southwest of the airport runway. The solid waste disposal site is currently unfenced and may be reaching the end of its useful life. Garbage does not appear to be sorted by type. Organic waste is typically burned at the landfill to reduce its attractiveness to wildlife.

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## 3.5 DEVELOPMENT CONSTRAINTS

There are a number of constraints to development in Taloyoak that were considered. A summary of each of the constraints noted is discussed below:

- **Airport zone** – The zoning regulations of the Taloyoak airport (Spence Bay Airport Zoning Regulations) apply to a 4-km radius from the reference point of the airport. Building and/or structure height is restricted in the vicinity of the airport such that the approach surfaces, the outer surface and transitional surface areas are not pierced. Transport Canada also maintains a series of land use guidelines in the vicinity of airports to minimize hazards to overflying aircraft. These regulations are intended to reduce the risk of bird strikes and to minimize conflicts between airport operations and sensitive land uses adjacent to airports. Typically, these guidelines restrict landfill sites and reservoirs within 8 km of the airstrip. The current landfill site and sewage lagoon are within the 8 kilometre distance, which may pose some additional risks.
- **Physical features** – The topography and drainage courses in Taloyoak are somewhat challenging for development, although less so than in other Nunavut communities. The land is moderately rolling, with some large rocky outcrops. Some boulder fields are within proximity of the townsite, which may indicate some degree of frost heaving. A number of small lakes, ponds and streams are located around and through the town.
- **450m setback from Sewage Treatment & landfill sites** – Any existing or former waste disposal site, which includes the wetland sewage treatment system, is subject to the 450m Public Health Act (General Sanitation Regulations) development setback for residential development and any use involving food

preparation or storage. The General Sanitation Regulations of the Public Health Act define “waste disposal ground” as “any place used for the disposal of garbage, refuse, excreta or other waste material.” Only industrial uses should be considered inside the 450m setback areas.

- **Watercourse/waterbody setbacks** – A development setback of 30m should be applied to any significant watercourses that are identified.
- **100’ strip** – The strip of land measured 100’ from the high tide mark is Commissioner’s Land and no development is generally permitted, which preserves access to the waterfront for recreational and traditional activities. Though it has not been identified as a specific concern in the community consultations, the issue of sea level rise and beachfront erosion due to climate change may become an issue over the twenty year planning period. Preservation of the 100’ strip is especially important in light of these challenges.
- **Aggregate resources** – Taloyoak has several large gravel deposits just outside the built up area. While these are important resources for community building (e.g. roads, lot fill), these deposits should not be built upon so that they remain a resource to the community.
- **Inuit owned lands and archaeological sites** – While Inuit owned lands and archaeological sites are considerable community assets, they can also act as constraints to development. Care must be taken to preserve archaeological sites from development. Inuit owned lands may be developed over time; however, this is dependent on the willingness and co-operation of the Inuit of Nunavut, and their representative organizations.

## 4 COMMUNITY NEEDS

### 4.1 PHYSICAL FACILITY NEEDS

This compilation of community facility needs was based on a review of technical reports, stakeholder interviews and input received from the public. The needs were further divided into short term (0 to 5 years), medium term (6-10 years) and long-term (beyond 10 years).

#### Short Term (0 – 5 years)

- |   |   |
|---|---|
| • Hamlet office                                 | • School                                    |
| • Youth centre                                  | • Office space                              |
| • Health centre                                 | • Centralized storage outside the core area |
| • Co-op store expansion                         | • Hamlet garage                             |
| • New water source and water treatment facility |   |

#### Medium Term (6-10 years)

- Expansion of the community hall and arena
- Larger community freezer



**Long Term (Beyond 10 years)**

- Expansion of the community to the east of Stanners Harbour
- Expanded sea-lift facility

## 4.2 LAND NEEDS

This section of the report provides an estimate of the amount of land that will be required for various land uses to 2030. Land use needs are anticipated to rise in relation to future population growth. The need for land in each category will also be tied to the specific facilities identified in Section 3.5.1. The estimated land use mix in 2030 is summarized in Table 5.

**Table 5 Estimated land use distribution by 2030**

Land Use	Current Area (ha)	Additional Area (ha)	Future Area (2030)	Percent
Residential (low and medium density)	10.7	10.8	21.5	43%
Commercial	2.1	2.0	4.1	8%
Public/Institutional	5.5	5.0	10.5	22%
Open Space (active uses)	1.2	1.3	2.5	14%
Transportation and Communication	2.0	0.5	2.5	8%
Industrial	3.5	5.1	8.7	5%
<b>Total</b>	<b>25.1</b>	<b>24.7</b>	<b>49.8</b>	<b>100%</b>

**Residential**

As reported in Section 2.2, residential land use needs are estimated to be about **10.8 hectares**, assuming future average residential densities of 20 units per net hectare.

**Commercial**

The community currently has 2.1 hectares of commercial lands. The future demand for commercial lands is estimated based on a proportional increase relative to population, plus a factor of 20% to account for the possibility of more vigorous business growth as part of efforts to reduce the high unemployment rate. This method results in a need for another **2.0 hectares** of commercial lands to 2030.

**Public/Institutional**

The community currently has 5.5 hectares of public/institutional lands. The future demand for public/institutional lands is estimated based on a proportional increase relative to population, plus a factor of 20% to account for the need for large new public uses (i.e. school, college campus) that would be required once the community reaches certain population thresholds. This would result in a need for about **5.0 hectares** of public/institutional lands. By checking this number against identified community facility needs this estimate appears to be reasonable for the year 2030.

**Open Space**

Taloyoak currently has 1.2 hectares of active open space (e.g. park and playground) lands. The future demand for open space lands is estimated based on a proportional increase relative to population, plus a factor of 25% to

make up for the current scarcity of outdoor recreation facilities. This would result in a need for about **1.3 hectares** of open space lands. Assuming that there may be up to two new major playing fields and a few small playgrounds installed in new residential areas by 2030, an estimate of 1.3 hectares is considered reasonable.

### **Industrial**

Taloyoak currently has 3.5 hectares of industrial lands. The future demand for industrial lands is estimated based on a proportional increase relative to population, plus a factor of 50% to account for the need to provide secure long-term storage, new garage and workshop facilities and space for new business ventures. This would result in a need for about **5.1 hectares** of new industrial lands to 2030.

### **Transportation and Communications**

Taloyoak currently has 2.0 hectares of communication and transportation lands, excluding the airport lands. It is assumed that upgrades to communications equipment can be largely provided on-site; therefore an estimate of **0.5 hectares** is provided for the land needs in this category to 2030. While the sea-lift area may need to be expanded in the long-term, there is very little physical space available in the current harbour to expand the sea-lift facility. Storage areas are therefore assumed to be located in an industrial area away from the harbour.

## **4.3 GOVERNANCE AND SOCIAL NEEDS**

The following items were identified during the community consultations as community needs that do not have physical (land or structural) requirements. However, they are important needs relating to the satisfaction of social goals and building community governance capacity. Some may be appropriately addressed through the Community Plan update (e.g. Zoning By-law and development permit system), while others will be addressed through other means (e.g. Community Economic Development Plan, house numbering system, community learning opportunities). These needs include:

- Zoning By-law
- Community Economic Development Plan
- Development permit system and fee schedule
- Street name and house numbering system
- Quarrying agreements
- Effective coordination of government services (including Nunavut Housing Corporation)
- Land surveying to lead development activity
- Community learning opportunities

## 5 COMMUNITY GROWTH OPTIONS

### 5.1 INTENSIFICATION

There are a number of opportunities to reorganize and redevelop the core area of town over the planning period, which will free up centrally-located development lands for more intense uses. A number of small and obsolete buildings can potentially be removed, including the old Paleajook Co-op Hotel, warehouses behind the community radio station and warehouses across from the co-op store. Residential lands near the harbour (referred to locally as Holy Town), and west of the school (referred to locally as Ghost Town), can also be more effectively used.



### 5.2 NORTHWESTERN EXTENSION

In the short- to medium-term, the lands to the west of the Disneyland subdivision represent a good opportunity for future residential growth. However, the full potential of these lands for residential uses is constrained by the dumpsite buffer, the presence of several small lakes and the edge of the airport lands. Within the 450 metre buffer around the former dump, it may be possible to place additional industrial lots. The lands north of the airport road, are generally good candidates for commercial development; however, the small ponds and streams crossing through this area may restrict the overall development potential.



### 5.3 EAST OF STANNERS HARBOUR

The long-term community growth of Taloyoak is expected to be on the east side of Stanners Harbour. The lands on the east side of the harbour are generally flat tundra with some small ponds and streams crossing through. Overall, there appear to be fewer development constraints on this side of the harbour. If this option is accepted by the community, great care will have to be taken in preserving the important historical site from which the town derives its name on the access road around the harbour. The access road will need to be upgraded significantly as it will act as a primary route for vehicles and pedestrians getting to and from the core area of town.



## 6 REVIEW OF RELEVANT DOCUMENTS

### 6.1 TEMPLATE PLANNING DOCUMENTS

The following planning documents will serve as templates for the preparation of the Taloyoak Community Plan:

- **Hamlet of Kugaaruk Community Plan** - The Community Plan for Kugaaruk will serve as a template document for the preparation of the updated Community Plan for Taloyoak.
- **Hamlet of Kugaaruk Zoning By-law** - The current Zoning By-law for Kugaaruk will serve as a template for the new Zoning By-law for Taloyoak

### 6.2 REPORTS AND STUDIES

The following reports and studies were reviewed in preparing this background report:

- **Aggregate Resources Evaluation, Taloyoak, Nunavut: Geotechnical Engineering Research and Investigation, Kitikmeot Region, Nunavut, March 1999**
- **New Water Treatment Building for Taloyoak, NU**
- **Taloyoak Land Use Plan, 1994**

## 6.3 TERRITORIAL AND FEDERAL LEGISLATION/REGULATIONS

### **Planning Act, R.S.N.W.T 1988, c.P-7.**

The Planning Act outlines the legal framework and requirements for the adoption and implementation of a General Plan and Zoning By-law. The contents of this Act were carefully reviewed and a few important points are highlighted:

- *"The General Plan must:*
  - 3 (e) include proposals relating to the provision of public roadways, services, public buildings, schools, parks and recreation areas and the reservation of land for these and other public and community purposes;*
  - (f) include a schedule setting out the sequence in which specified areas of land may be developed or redeveloped and in which the public services and facilities referred to in paragraph*
  - (g) include proposals relating to the financing and programming of public development projects and capital works to be undertaken by the municipality or other public authorities having jurisdiction within the area included in the general plan*

### **Hamlets Act R.S.N.W.T. 1988,c.H-1**

The Hamlets Act outlines the legal framework and extent of powers of hamlets. Community Plan policies and Zoning By-law regulations should be in conformity with the powers outlined in the Hamlets Act.

### **Environmental Protection Act (Nunavut) R.S.N.W.T 1988, c.E-7.**

Environmental Protection Act (Nunavut) outlines the legal framework and extent of powers for the protection of the environment which is defined as water, air and land. The contents of this Act were carefully reviewed and a few important points are highlighted:

- *The council of a municipal corporation may, by by-law,*
  - (a) prohibit or regulate the disposal of litter on public or private land; or*
  - (b) define unsightly land, prohibit owners or occupiers of land from allowing that land to become unsightly and provide for the improvement of unsightly land. R.S.N.W.T. 1988,c.117 (Supp.),s.14.*

### **General Sanitation Regulations, R.R.N.W.T. 1990, c.P-16 (Public Health Act)**

The General Sanitation Regulations outlines regulations for sanitation to protect public health, including regulations for development setbacks from 'waste disposal grounds'. The regulations define "waste disposal ground" as any place used for the disposal of garbage, refuse, excreta or other waste material. A few important sections are highlighted:

- 8. No building used for human habitation shall be*
  - (a) nearer than 450 m to a waste disposal ground;*

**28.** Every waste disposal ground shall be:

- (a) located at least 90 m from any public road allowance, railway, right-of-way, cemetery, highway or thoroughfare;*
- (b) located at least 450 m from any building used for human occupancy or for the storage of food; and*
- (c) situated at such a distance from an source of water or ice for human consumption or ablution that no pollution shall take place.*

### **Nunavut Archaeological and Paleontological Sites Regulations, 2001**

The Archaeological and Paleontological Sites Regulations are enforced under the federal Nunavut Act and are intended to protect sites of historic significance. Exploration for archaeological and paleontological resources must be carried out by individuals holding either a Class 1 or Class 2 permit. Class 1 permits are issued to qualified applicants to survey and document archaeological or paleontological sites in a way that does not disturb the site. Class 2 permits are more extensive and provide for excavation and removal of artefacts present on the site.

Several sites of archaeological significance have been identified in the vicinity of Taloyoak. Accordingly, planning for community expansion must be sensitive to the existence of these sites. In the event that excavation is necessary, the work should be undertaken by a qualified individual holding an appropriate permit.

### **Nunavut Land Claims Agreement, 1992**

This document lays out the legal framework and extent of powers of the land claim agreement between the Inuit and the Government of Canada and which created the Nunavut Settlement Area. Article 11 (Land Use Planning), Article 12 (Development Impact) and Article 14 (Municipal Lands) of this Agreement are particularly relevant to municipal planning. The key points are highlighted:

- *The principles of Article 11 “shall be applied in the development of municipal plans”. These principles include:*
  - *Social, cultural and economic endeavours of the human community must be central to land use planning and implementation;*
  - *Protect and promote the future well being of residents, with particular attention to the Inuit and Inuit Owned Lands;*
  - *The public planning process shall provide an opportunity for active and informed participation and support of Inuit and other residents affected by the land use plans;*
  - *Plans to provide for the conservation, development and utilization of land;*
  - *The planning process is to be integrated with all other planning processes and operations, including the impact review process contained in the Agreement.*
- *“The NPC and municipal planning authorities shall co-operate to ensure that regional and municipal land use plans are compatible”.*
- *As per Part 6 of Article 14, Municipal Boundaries are drawn in such a way as to provide the municipality with sufficient lands based on current and future needs to encompass:*
  - (a) the projected expansion requirements of the community;*



- (b) the community water supply;*
  - (c) the solid waste disposal areas;*
  - (d) resource areas sufficient to provide a supply of granular, quarry, and construction materials for the community;*
  - (e) existing or proposed community transportation and communication networks;*
  - (f) community airstrips and docking areas;*
  - (g) a necessary buffer area around the perimeter of the projected urban community to control development and discourage unorganized development;*
  - (h) areas contiguous to the community that are actively utilized by the community have property development implications; and*
  - (i) areas unique to an individual community that may arise on a case-by-case basis and which may be required by a community in the conduct of its municipal responsibilities.*
- *Article 12 (Development Impact) establishes the Nunavut Impact Review Board (NIRB). Article 12 only applies to Inuit Owned Lands. Section 12.3.2 states that project proposals falling within Schedule 12-1 shall be exempt from the requirement for screening by NIRB. The NPC shall not forward such project proposals to NIRB. Relevant exemptions are:*
    - 1. Land use activities not requiring a permit or authorization from the Government of Canada or Territorial Government.*
    - 3. All construction, operation and maintenance of all buildings and services within an established municipality, except for bulk storage of fuel, power generation with nuclear fuels, or hydro power and any industrial activity.*

## 7 PUBLIC CONSULTATION PROCESS

### 7.1 CONSULTATION APPROACH

The consultation components of this project are essential to ensure the vision and spirit of the community flows through the Community Plan. The consultations are designed to draw on existing local knowledge and to explore the needs and concerns of diverse stakeholders. Open and participatory consultation allows residents to define how their community will take shape and grow. Consultation also brings people into a process of shared learning where diverse and sometimes opposing views come into focus. The following consultation methods will be used:

- Interviews / small group meetings
- Workshops
- Open houses
- Public meetings

The following stakeholders have been identified:

- Hamlet Council
- Hamlet staff
- Elders

- Hunters & Trappers Organization
- Paleajook Co-op / Arctic Co-operatives Limited
- Northwest Company
- District Education Authority
- Nunavut Housing Corporation
- Taloyoak Housing Association
- local residents and businesses
- GN Department of Community and Government Services
- GN Department of Education
- GN Bureau of Statistics
- GN Department of Health and Social Services
- GN Department of Economic Development and Transportation
- Nunavut Airports
- Qulliq Energy Corporation
- RCMP

## **7.2 FIRST COMMUNITY VISIT (JULY 20-23, 2009)**

### **Meetings and Interviews**

#### ***Introductory meeting***

***July 20, 2009, 9 am***

*Andrew Sacret, FoTenn Consultants*

*Corey Dimitruk, GN- Community and Government Services*

*Chris Dickson, SAO*

*David Irqut, ASAO*

*Johnny Kootook, PLA*

- Council has identified a list of projects/issues that need to be completed and/or addressed through the Community Plan process:
  - o Widening of main roads
  - o Street names and house numbers
  - o Youth centre – find a proper building and location
  - o New Hamlet office building (immediate priority)
  - o Health centre and wellness centre development
  - o New school location
  - o Development permit system – fees as % of project value
  - o Quarrying agreements
  - o Construction fees
- The Hamlet has applied for funding under the access trails program - \$80k requested and \$15k provided
- There have been a number of critical infrastructure delays in recent times (i.e. health centre, water system upgrade)
- At the garbage dump, there are some problems with oil barrels and residual contamination – both the waste oil, and sewage lagoon runoff go into the ocean around the same place (Note: find out about conditions of water licence)
- David asked what the government's priorities are – Corey replied that the priority is to accommodate expected growth. Chris added that the priority should also be on surveying an appropriate amount of new land for development and creating a development permit system.
- Andrew asked about the nature of the drainage problems experienced in Taloyoak. Chris and Johnny explained that with the new Nunavut Housing Corporation projects the NHC has been placing houses on



elevated gravel pads, without proper culverts. Water drains into the low areas and gets trapped in these ponds. Agreed that it will be necessary to get NHC on board to solve these problems.

***Council Meeting  
July 20, 2009, 10 a.m.***

*Andrew Sacret, FoTenn Consultants  
Corey Dimitruk, Community and Government Services  
Johnny Kootook, Planning and Lands Administrator  
David Irqut, Assistant SAO  
Joseph, Interpreter  
5 Councillors*

- The meeting started slightly late (10:15 a.m.), and without quorum. Councillors reminded Andrew and Corey that attendance for summer meetings can be problematic. Andrew explained that the meeting would be for information only and that no motions would be required. David Irqut took official minutes of the meeting.
- Andrew introduced himself, Corey Dimitruk and the other members of the consulting team that would be involved in the project. The presentation contained information about the planning process and timelines, the population and housing forecast, and a discussion of planning constraints. Andrew also asked Councillors to identify short and long-term needs for the community, as well as additional stakeholders that they would like to see consulted.
- Councillors present at the meeting were generally supportive of the population forecast, though there was some discussion that the projections may yet be too low. Andrew explained that under the **medium** projection of 2.25% annual growth, the population of Taloyoak in 2030 could be in the range of 1380 people (an increase of nearly 600 people).
- The projections anticipate an increase of 333 new homes over the 20 year planning period to accommodate new growth as well as alleviate overcrowding. (average household size as reported in the 2006 Census was 4.4 people, versus 3.7 in Nunavut and 2.5 in Canada).
- Andrew showed Council the preliminary list of short-term infrastructure needs, which included, the hamlet office, community dock, health centre, and new school
- Councillors articulated a need for the following additional needs in the near term (next 10 years):
  - o New airport terminal building – the current ATB is too small (only First Air has a dedicated space, which is inadequate. Canadian North does not have a proper desk. The building requires 24-hour vigilance to ensure that the sewage and water systems do not freeze up. (Corey indicated that Taloyoak is the last Kitikmeot community to receive a new ATB).
  - o Expansion to the Co-op store
  - o The floating dock
  - o Additional snow removal
  - o Several condemned and outmoded buildings in the core need to be redeveloped.
  - o A survey is needed to adjust lot lines.
  - o Paved roads – although the community is small, a lot of dust is generated by traffic (this was identified as a long term need).
- Other concerns and questions raised by councilors at the meeting were:
  - o How will the sewage trucks get access to the sewage pump outs on the new five-plexes when there are no access roads behind the houses? (This was not addressed immediately – see notes on community tour with Hamlet Foreman and Pat Edwards of NHC)
  - o Poor drainage of residential lands creates puddles where the children play. These pools are full of garbage and bacteria and are consequently not healthy play areas for children. There were also concerns over the potential for sewage spills to find their way into the puddles. Councillors shared their observations that the drainage problems are often created when Nunavut Housing Corporation places their gravel pads on the lot without proper culverts installed. Water is then able to collect in the depressions between the pad and the (raised) roads.

- The location of the elders 4 plex immediately next to other NHC housing for young families may be a poor choice. The elders fear that the location will not afford them the peace and quiet that they want.
- How long will it take for the zoning by-law to be enacted? Andrew explained that the process is intended to be complete by the end of 2009, or early 2010. Corey emphasized that the zoning by-law will provide a set of consistent development regulations for everyone to follow.
- Andrew showed Council the land use constraints map and asked a series of questions regarding the potential future development areas. Council was interested to know whether the old landfill site could be cleaned up, and/or whether there was anything that could be done to reduce the 450 m buffer. Corey mentioned that it might be possible to do this eventually, but Andrew emphasized that the GN has not yet made any exceptions to the rule, and that they seem unwilling to entertain such proposals.
- Councillors also mentioned that some of the biggest challenges for residents are in finding a job. The plan should address land needs for employment.
- Andrew mentioned that the purpose of the land use plan is to ensure that the proper tools are in place to provide an equal playing field for all residents.
- Corey mentioned his idea of upgrading the main road linking Disneyland to the centre of the community to better protect pedestrians.
- The councillors present at the meeting thanked Andrew and Corey for their presentation. The meeting ended at 11:55 a.m.

***Community Tour with Hamlet Foreman  
July 20, 2009, 1:30 p.m.***

*Andrew Sacret, FoTenn Consultants*

*Corey Dimitruk, GN Community and Government Services (present for first half)*

*Chester Porter, Hamlet Foreman*

*Johnny Kootook, Planning and Lands Administrator*

*Pat Edwards, Nunavut Housing Corporation (present for first half)*

Gravel sources

- The Hamlet currently takes its gravel from the pit near the sewage lagoon (check map - #4?)
- Lyall Construction typically takes gravel from the large deposit behind the town (#5).
- The Hamlet also owns a sizeable stockpile of gravel and sand, which is located approximately 2 kilometres north of the airport, on the road to Middle Lake. The Hamlet has not taken gravel and sand from these stockpiles for some time, but they do have the option of doing so.

Landfill sites

- The old landfill site was used by the Hamlet until the 1980s. Chester claims that the landfill does not contain waste fuel barrels.
- The current landfill site is getting full, and the site looks disorderly.
- The hamlet has one garbage truck (capacity, age?)

Sewage

- The Hamlet operates two identical sewage trucks (capacity, age?)
- The sewage lagoon is located to the southwest of the current landfill site and appears to be sufficient for now (check conditions of water licence).
- Pat Edwards (Nunavut Housing Corp), explained that the sewage pump outs for the new five plexes are located on the front (road) side of the houses, though the tanks are located at the back of the units (reference from Council concern).

Water

- The Hamlet operates two identical water trucks (capacity, age?)

- The town draws its water from the lake behind the Northern Store. A new water lake (Canso Lake) has been identified directly to the north of the current water lake.
- The new water lake is further removed from the community, which is expected to reduce the potential for contamination of the town's water. There was a sewage spill at the Northern Store a few years ago, that could have been more severe.
- The water pumphouse and treatment plant has been promised for many years, and the community is eager to see some action on this item very shortly. (Note, the watershed of the current water lake is likely larger than shown on the constraints map – will take in many of the surveyed lots on the designated road allowance towards the Northern Store)
- The water truck filling station is attached to the power plant.

#### Hamlet facilities and equipment

- The Hamlet has only one operable loader. There is a need for some additional heavy machinery, some of which will come up on the sealift in September 2009.
- The Hamlet garages down by the water are too cramped to work in and store the Hamlet vehicles, especially during the winter. It was noted that the principal garage looks to be in rough shape (a supporting structural post around the middle bay door had been compromised by a minor collision).

#### Snow clearing

- Chester could not identify many problem areas for snow drifting. He did indicate that the fork in the road leading to/from the airport tends to require frequent clearing. The community hall and arena are immediately downwind of this site.
- Drifts can collect on roads where there are boulders adjacent to the roads.

#### Drainage

- Chester identified some general drainage problems around the houses at the base of the hill leading to the bay. He did not identify specific locations where water collects.

### ***Nunavut Housing Corporation***

***July 20, 2009, 2:30 p.m.***

*Pat Edwards, Kitikmeot Housing Manager*

*Andrew Sacret, FoTenn Consultants*

*Corey Dimitruk, CGS*

*Johnny Kootook, PLA*

- NHC is building three five-plexes this year, with a four-unit elders residence and a three-plex also on the books for 2009.
- The NHC plans 2010 to build one more five-plex next year plus 7 single-dwelling SIPS (Structurally Insulated Panels??). In reviewing the map of remaining sketch lots in Taloyoak, Pat demonstrated that there will be virtually no residential lots left to develop in the community after the 2010 housing allotment is completed.
- Pat's map of the lots and roads in the north end of Disneyland (near the Boothia Inn and Community Hall) differs from the sketch lot layout provided by CGS HQ. The lot numbering system also differs. Pat's map shows that all of the proposed five plexes fit within lots, whereas the CGS map has seemingly inconsistent road widths and lot boundaries. The CGS sketch lots are labeled SK-000. All parties agree that it is vital to work from consistent maps. Andrew and Pat have agreed to swap electronic versions of their maps (subject to GN approval). Pat Edwards – [pedwards@gov.nu.ca](mailto:pedwards@gov.nu.ca); Gary Cooper – [gcooper@gov.nu.ca](mailto:gcooper@gov.nu.ca)

### ***Kitikmeot Inuit Association***

***July 20, 2009, 3:30 p.m.***

*Jayko Neeveacheak, Community Liaison Officer  
Andrew Sacret, FoTenn Consultants*

- Andrew asked about the status of the IOL lands within the community (notably the square parcel west of the Disneyland Subdivision). Jayko was unaware of any IOL lands (administered by KIA) within the community but he did identify several large undeveloped areas outside of the community on a topographic map. Andrew promised to follow up by sending maps of the IOL parcels identified by CGS Planning HQ in Kugluktuk ([jayko@giniq.com](mailto:jayko@giniq.com)).
- Jayko identified some key community needs, including a youth and elders centre, and an arts and crafts centre.
- KIA offers social support programs to NLCA beneficiaries in the community.

***Community Meeting, Community Hall  
July 20, 2009, 6:30 p.m.***

*Andrew Sacret, FoTenn Consultants  
Corey Dimitruk, CGS  
Johnny Kootook, PLA  
Joseph, Interpreter  
47 residents*

Andrew began with a presentation of the future growth of the community, as well as the projected community needs over the next several years. Andrew explained that the purpose of the meeting was to hear from the community and to discuss future ideas for future community growth. A discussion of the planning constraints revealed a common perception that there is a vast amount of land to develop. However the constraints map identifies several major restrictions to development: 1) garbage dumps (new and old); 2) airport; and 3) the water shed area of water supply

Some of the main comments heard at the public meeting included:

- A perception that the Kitikmeot Region gets passed over and that other regions get more facilities faster
- Questions regarding the timing of the new health centre, airport terminal, and water supply – these projects have been promised for years and there is still no action. Corey responded that it is important to make the views known – one way is to send a message to the Government of Nunavut through their MLA (Enuk Pauloosie) and the Kitikmeot Regional Director of CGS, Kevin Niptanatiak. Corey explained that all projects have developmental cycles and there are delivery challenges.
- Move airport to make room for more growth. Corey responded that other land uses are easier to move than airports
- Fill in lake north of community. Andrew explained that it is a natural feature and that to fill a lake requires moving land from somewhere else – expensive and destructive of nature. Also the water has to go somewhere.
- General support for development of the point and the east side of the harbour. However some participants cautioned against disturbing the graves on the point, and the historical site on the east side of the harbour.
- It was suggested that the tank farm should be moved closer to the sea – in the current location, there might be spills that can go into the ground under homes.
- A question was asked about the former dump: can it be cleaned to permit housing within the current 450m buffer? Andrew explained that this is not likely, as the GN position has always been that the buffer cannot be changed.
- Change housing quality – housing is put up very quickly and some doesn't seem that durable.

- Existing houses are too close to each other. Seniors want peace and quiet and new housing is too close – lots of noise from children. Corey and Andrew responded that the new zoning by-law will introduce new tools which will help to alleviate these issues.
- A question was asked regarding existing land and who owns (leases) it. Response was that there is much land tied up within Taloyoak that creates a need to develop new land. The focus therefore is to have the land relinquished where it is not currently being used effectively. Storage is not a desirable commercial use, and would be better placed in industrial areas.
- It was suggested that the community should create a planning committee – this is always a positive thing
- Many participants expressed their thanks for the chance to speak
- Andrew also explained that a remedial survey would be done to improve the definition of roads and to make sure that houses are properly situated on a lot.

Participants were asked to write some of their final comments on Post-It-Notes on the side wall on their way out. The written comments included:

Between houses – more gravel needs to be put on.  
Old houses to be written off. Bugs inside, not liveable

We are in need of more housing! Too many people living in one, causes problems

Get rid of all houses in “ghost town” and turn it into industrial land

Road to Netsilik – Trail needs to be improved. No road, a lot of garbage is left behind. It is a hunting area and has to be taken care of.

Make sure Kitikmeot gets what we want and need! Not only the town other Regions.

In Inuktitut:  
- Develop road to Netsilik Lake beyond Catholic Cemetery

### ***School***

***July 21, 2009, 9:30 a.m.***

*Lucy, School Administrator*

*Johnny Kootook, Planning and Lands Administrator and District Education Authority Representative*

*Andrew Sacret, FoTenn Consultants*

- The school houses about 280 students, with a capacity of 350.
- In a few years, a new school will be necessary – probably a high school. No plans are currently in the works. The DEA flagged the need for a school to the (former) Education Minister, Ed Picco 2 years ago.
- The existing school would be reserved for the younger children
- The greatest snow drifting problems are on the south side, near the entry ramp.

### ***Royal Canadian Mounted Police***

***July 21, 2009, 10:30 a.m.***

*Jason Myatt, Constable*

*Andrew Sacret, FoTenn Consultants*

*Johnny Kootook, Planning and Lands Administrator  
Corey Dimitruk, Regional Community Planner*

- RCMP built a new office in 1994 – facility is sufficient for time being
- The staff houses are dated but adequate for now
- 95% of calls in town are alcohol related
- A major issue is to create more opportunities for youth to be busy in constructive ways; boredom and lack of supervision can lead to vandalism
  - o Community hall doesn't have enough activities for kids
  - o Empty buildings are a target for break-ins
  - o The golf tournament sponsored by the RCMP is a positive
- A new Community Outreach Worker has been hired by the Hamlet to handle family intervention programs
- There is not currently enough housing for single males in the community. When young males get too old to live in the family house, they don't have a proper place to go.
- There are no major traffic problems in Taloyoak – fairly standard relative to other communities in Nunavut.

***Northern Store  
July 21, 2009, 11:00 a.m.***

*Tamar, Manager, Northern Store  
Andrew Sacret, FoTenn Consultants  
Corey Dimitruk, CGS*

- The Northern Store is planning an expansion to the west on the current site.
- Efforts will be made to salvage the heritage HBC building behind the store.
- There are no other subsidiary businesses in town after the store.
- The Northern Store employs about 15 people in town.

***Youth Workshop (July 21, 2009, 1-2 p.m.)  
Council Chambers***

*Andrew Sacret – FoTenn Consultants  
Corey Dimitruk – CGS  
Johnny Kootook – Planning and Lands Administrator (Hamlet of Taloyoak)  
12 teenaged youth*

Andrew started the workshop by providing some background about the Community Plan. Andrew then asked what things the youth enjoyed best about their community and what items needed improvement:

**What We Like Best**

- Hockey
- Safe place to live
- Land & Animals
- Culture
- More Houses
- Communication between people

**What Needs Improvement**

- Youth Centre – Shop
- More jobs needed
- Hamlet Gym
- Northern Store is too expensive (store)
- More activities for youth
- More communication between youth and elders
- Bigger Buildings (e.g. arena)

Andrew asked the youth to do an asset mapping exercise using an aerial photo of the community. Green dots were placed on places/features that were seen as 'positive' and red dots were placed on places/features that are 'negative' or 'needing improvement'. The dots were further discussed and colour-coded sticky notes were also placed on the map to summarize the discussion.



#### **Blue Sticky Notes (neutral)**

##### Golf Course

Rough and small only 3 holes, often muddy  
Could add/move the baseball diamond out there

#### **Pink Sticky Notes (needs improvement)**

##### Community Hall

Old and small  
Has poor hours yet generally a good place to hang out  
Could add sound system and/or musical instruments

##### Day Care Centre

No Babysitters, I can't get jobs

##### Youth Centre

Hamlet needs to finish construction  
Inside, it should have video games, tv, kitchens, restrooms, pool table, camping equipment

##### School

Playground insufficient  
Community needs a bigger school and a bigger gym  
The gym bleachers should be placed on the side of the gym where the doors are located.

#### **Green Sticky Notes (positive features)**

##### Baseball field

Needs more activities at/around the baseball diamond  
Better fence (backstop) is needed.

Ponds (near south end of town)  
Should put in a bridge or fill in the ponds  
Good place to play sports in winter

Need a restaurant

Northern Store  
Make it bigger and cleaner  
Add a Quick-Stop store (in the co-op)

***Taloyoak Hunters and Trappers Organization  
July 21, 4:00 p.m.***

*Simon Qingnaqtuq, Manager  
Andrew Sacret, FoTenn Consultants*

- The Hunters and Trappers Association building is insufficient to meet the needs of the organization. A new building should have office space above, with a meat plant and/or tannery downstairs.
- The community freezer is too small for whale hunts and other large species. Funding for the new hamlet office could include a new freezer and HTO space.
- In general more commercial opportunities are necessary in the community. It would be a good idea to create a community office space that would allow new businesses to get started. It would provide more opportunities for sharing ideas and training.
- Taloyoak (and the Kitikmeot in general) are left out of funding arrangements for new facilities.
- The HTA has considered getting into the outfitting business but needs more information (i.e. a study of local wildlife – caribou, muskox, polar bears) and better business training.
- More workshops on business skills would be helpful in the community.
- Fall/winter community meetings will be more successful.

***Lyll Construction  
July 22, 2009, 9:30 a.m.***

*Dennis Lyall, President  
Andrew Sacret, FoTenn Consultants*

- Lyll Construction is a major employer in town – they have contracts in sewage collection, fuel delivery/supply, airport ground crew, snow removal.
- Things that could be changed in the community include:
  - o Major cleanup of community (e.g. removal of old vehicles)
  - o Better planning for storage to clean up old shacks
  - o Access roads to driveways
  - o Better coordination of initiatives from different government departments
- Community population forecast is low (should be more than 1380)
- Dump and sewage lagoon improvements are necessary
- Protection of historical sites is important
- The community boundary used to be circular, now it is rectangular. How was this changed?
- The community has some issues with NTI regarding access trails.



- Should speak with lands division at KIA in Cambridge Bay regarding the future of the NTI lands (square parcel).
- For the new dock facility to work properly, it is necessary to reduce the size of the breakwater.
- Government (federal and territorial) should provide staff housing
- Storage space is lacking – there should be a place for sea containers
- The government should be more committed to follow through on infrastructure contracts
- Development should go more towards the airport.

***Taluq Designs***

***July 22, 2009, 1:30 p.m.***

*Mona, Manager – Taluq Designs  
Andrew Sacret, FoTenn Consultants*

- Taluq Designs started in 1992, but did not get a permanent building until 1995.
- Current space offers good workshop area for artisans.
- Local artisans known best for packing dolls, although they make some other products as well (e.g. carvings, slippers, sweaters, hats, embroidered bags).
- Business employs one manager, one full-time and one part-time sewer, as well as several other people on a piecework basis.
- Taluq Designs is part of the Nunavut Development Corporation headquartered in Rankin Inlet. Brian Swatske is the NDC contact (867-645-3169).

***Elders Centre Meeting***

***July 22<sup>nd</sup>, 2009, 3 p.m.***

*Andrew Sacret, FoTenn Consultants  
Johnny Kootook, Planning and Lands Administrator  
Joseph, Interpreter*

The discussion took place during the elders' weekly games. Andrew and Joseph explained the background of the community planning process, including the timeframe for the plan, the growth projections and some of the community needs. Elders spoke freely about their chief concerns in regards to the community plan:

- Elders like to live in a central location (i.e. close to stores, health centre etc.)
- Houses can be built along west side of the road towards the R.C. church
- Area behind Inuit Broadcasting Corporation is wetland but could fill in with gravel and put houses there
- Elders do not want to live in multiplexes, particularly in close proximity to young families – too noisy.
- Demolish old units and replace with new housing
- Culverts need to be put in place for proper drainage
- Demolish old buildings beside SAO House and rebuild new units.

**Health Centre**

**July 23, 2009, 9:30 a.m.**

*Nellie Campbell, Nurse in Charge*

*Johnny Kootook, Planning and Lands Administrator*

*Andrew Sacret, FoTenn Consultants*

- Several programs are offered through the health centre:
  - o Visiting specialists – pediatrics, eyes (2x/year), physio/occupational therapy (annually), ultrasound and gynaecology (4x/year), ENT/Audiologist, General Physician (every six weeks), dentist.
  - o Well man/well woman/well child programs stress prevention of health problems.
- There are two nurses, a housekeeper, a social worker and a mental health worker employed through the health centre.
- The new health centre will have more space and equipment allowing programs to be offered together in one place
  - o Home care will be offered through the new facility
- To encourage healthy lifestyles, the following things are needed in the community:
  - o More recreation opportunities – keep people busy
  - o Children need more organized activities
  - o Short term learning programs (general interest courses of a Parks & Rec nature) – not a long program.
- Snow drifting around the health centre is worst:
  - o In the parking area
  - o On the road between the daycare and the health center
  - o In front of the garage
  - o On the turn in the road near the arena

**Recreation Director**

**July 23, 2009, 10:30 a.m.**

*Curtis, Recreation Coordinator, Hamlet of Taloyoak*

*Andrew Sacret, FoTenn Consultants*

- Community programs that have been offered recently are:
  - o Stop smoking program – unfortunately didn't work out too well
  - o Hockey instruction and life-skills program – offered once a year from former NHL coach
- Summer student program employs several students as program leaders for the day camp
- Hockey is a popular sport in the winter
- The gym is not open during the summer due to insurance concerns – would offer additional sport opportunities if open
- The community has had to stop dances for the time being due to substance abuse problems.
- The swimming pool is open Monday-Friday during the daytime, plus it can be open for evening rentals.
- Local teams go out to Cambridge Bay and Gjoa Haven on occasion (e.g. swim meets, hockey team – Taloyoak Trailblazers, volleyball).
- Soccer team goes to Yellowknife annually for tournament – there are more soccer players than hockey players in Taloyoak.
- The gym is most heavily used by teens and young adults (ages 15-21).
- Would like to offer more recreational programs, such as ping pong for people 40+
- Baseball diamond is used in the evenings, as well as the skateboard park and the playgrounds.
- Priority for recreation: get the youth centre opened to give youth things to do and keep them out of trouble.

**GN Senior Regional Community Planner  
General comments**

*Corey Dimitruk, Senior Regional Community Planner  
Andrew Sacret, FoTenn Consultants*

- Need to achieve higher density of development
- Fix road patterns and lot layouts, particularly in the older area of town
- Need to move storage uses out of the core area and onto more suitable lands to facilitate the release of lands for redevelopment (key parcels: Co-op storage and snowmobile shop, old warehouses near radio station, etc.)
- Consideration to widening of main road between core area and Disneyland and to create pedestrian right of way
- Industrial development should be directed out towards the airport – need to define industrial uses
- Ghost Town could be redeveloped with commercial uses

**Planning and Lands Administrator  
General Comments**

*Johnny Kootook, Planning and Lands Administrator  
Andrew Sacret, FoTenn Consultants*

- More activities needed for kids and adults
- Population projections seem too low
- There are no particular snow dumps in the community. Wherever the snow is, they pile the snow beside the road.
- On average, there are about 2 to 3 storms a year. The storms usually come from the north side.
- The winters are colder then previous years, and they last about 10 months which is the same as previous years. There are fewer storms today.
- The snow drifts beside buildings are usually 4 to 5 ft. deep and on the north side of the buildings.
- After a snow storm, the snow drifts are usually on roads which have turns. The curve in the road by the old Boothia Inn can be a problem area for snow.

**Senior Administrative Officer  
General Comments**

*Chris Dickson, Senior Administrative Officer  
Andrew Sacret, FoTenn Consultants*

- Priority project is to get the Hamlet office built – funding is announced so the Hamlet needs to move quickly.
- Pad placement in the residential area is causing drainage problems
- Necessary to clean up the beach area
- Place more housing lots along the road to the Catholic Church
- (Priority items discussed with Council listed in introductory meeting notes above).

**Telephone/email correspondence with other stakeholders**

**Re: Engineering Projects in Taloyoak**

**Tom Livingston, CGS, Regional Municipal Engineer**

**Michelle Armstrong, FoTenn Consultants**

**Water/wastewater/ supply / treatment**

- New water supply has been identified – intake pipe to go to Canso Lake;
- New treatment system being built close to Canso Lake;
- Watershed around Canso Lake must be protected from development;
- Existing water supply has been compromised by NorthMart store location – they had a near sewage tank spill at the Northmart;
- Design of water treatment system led by Dillon consulting – Gary Strong
- Nunavut-wide water license upgrade, reviewing sewage systems, including wetland treatment system in Taloyoak – appears to be working okay.

**New Hamlet office**

- Funding just announced for a new Hamlet office – the existing office will remain in place so need to find a location for the new Hamlet office
- Ann Peters of Dillon has been hired to facilitate site selection with Council

**Issues raised by SAO**

- The new SAO Chris Dickson has raised a number of issues that need to be addressed in the planning process:
- Wants to get a location for a new youth centre
- Roads are too narrow in the community
- There is the need for a new solid waste facility

**Aggregate Resources**

- There is an existing granite quarry and esker quarry
- Bringing in a crusher into the community to create gravel for airport runway expansion / rehabilitation and to build road to intake pumphouse for new water supply;
- Geotechnical investigation for Aggregate Resource Investigation;
- Goal is to create a stockpile for 5 years
- Aggregate report – EBA Engineering, Richard Kohler, (403) 723-6873

**RE: Tent rings and other archaeological sites**

**Julie Ross, GN Chief Archaeologist ([jross@gov.nu.ca](mailto:jross@gov.nu.ca))**

**Andrew Sacret, FoTenn Consultants**

- During the community visit, elder David Igutsaq indicated that he would be taking the Chief Archaeologist to see some tent rings on the ridge north of the community.
- Are there any other archaeological sites that will need to be preserved through the planning process? Julie forwarded a map showing known archaeological sites, which must not be represented directly on the Community Plan or on any other maps for public consumption, in accordance with GN policy.
- After Julie's site visit, she reported that sites around the community are in generally good shape and would not be in the way of future community development.

**RE: Fuel supplies**

**Todd MacKay, Manager Nunavut Field Operations – CGS Petroleum Products Division**

**Andrew Sacret – FoTenn Consultants**

**(by telephone 867-645-8443 – Rankin Inlet, confirmation via email [tmackay@gov.nu.ca](mailto:tmackay@gov.nu.ca))**

1. What is the current fuel capacity in Taloyoak?  
*Diesel – 3.5 ML  
Gas – 700 kL  
Jet fuel – 4 tanks in town holding 1.3 ML + tanks at airport holding another 100 kL.*
2. What is the annual fuel consumption in Taloyoak?  
*Diesel – 1.6 ML + 880 kL for QEC  
Gas – 350 to 360 kL  
Jet fuel – 770 to 800 kL  
Fuel deliveries are done through a barge system anchored in Tuktoyaktuk. 1-2 deliveries in Taloyoak each year.*
3. Are there any plans for expansions or upgrades to the tank farm in the near future?  
*Not in the next five years. Facility seems to be adequate for now.*
4. Looking out at the next 20 years, would there be a need for more land to add to the tank farm?  
*Not familiar enough with the facility to say for sure. Could check an aerial photo to see whether there is enough space on the current site for more tanks, if need be. There has been a jump of about 40% in jet fuel orders in recent years so aviation needs might drive the requirement for more tanks/tank farm space at some point.*

**RE: Co-op operations and long term needs**

**Robin Bird – Area Manager, Arctic Co-operatives Limited**

**Andrew Sacret – FoTenn Consultants**

**(by telephone 204-697-2243 – Winnipeg)**

- Co-op priority is to get the store expansion completed. ACL expects to start construction in Fall 2009 for an early 2010 opening.
- Construction of a new hotel is not in the short-term plans, but could potentially be considered as a longer-term venture
- Co-op supplies cable TV service locally
- The co-op might consider moving storage uses outside of the core area, but would like to keep storage as close to the store as possible. Priority is to work out issues with the new store construction and to figure out long-term storage needs later.
- The co-op employs about 15 people locally. The co-op sells locally made art to the rest of the co-op system for resale – not much is sold in the store.
- There is one staff apartment for the manager attached to the store. More staff housing might be needed in the future.

**RE: Airport Zoning Regulations and other airport issues**

**Chuck Frankard – Transport Canada**

**Andrew Sacret – FoTenn Consultants**

**(by telephone 204-983-2547 – Winnipeg)**

- Spence Bay Airport Zoning Regulations (no name change to Taloyoak) are available online under the federal Aeronautics Act. The regulations describe a series of imaginary planar surfaces that protect the airspace needed by aircraft to circle the airport, as well as takeoff and land safely. Buildings and other obstacles near the airport must not pierce through these surfaces.

- Roads are typically defined to have an equivalent height of 14 feet (4.3 m) to account for the height of vehicles. (Note: The access trail beside the runway may therefore pierce the transitional surface on the side of the runway.)
- Transport Canada has a publication TP 1247 – Land Use in the Vicinity of Airports that provides guidance on the types of land uses that are appropriate/inappropriate near airports and how to mitigate negative effects.
- Electronic navigation equipment is maintained by NavCanada. Any questions should be directed to NavCanada – 1-800-876-4693 (general), Robert Dobson (780-413-5545) or Jeff Blomquist (780-413-5485) in Edmonton.

**Outstanding correspondence (waiting for responses)**

*Carson Gillis – Nunavut Tunngavik/ Kititmeot Inuit Association*

- Status of IOL parcels in Taloyoak
- Plans for development on rectangular parcel next to Disneyland subdivision
- Issues regarding access trails (flagged by Dennis Lyall – see above)

*Lee Brenton/Andrew Clarke – Qulliq Energy Corporation*

- Capacity of current plant
- Plans for expansion and land needs
- Alternative energy projects

## **8 RESOURCES**

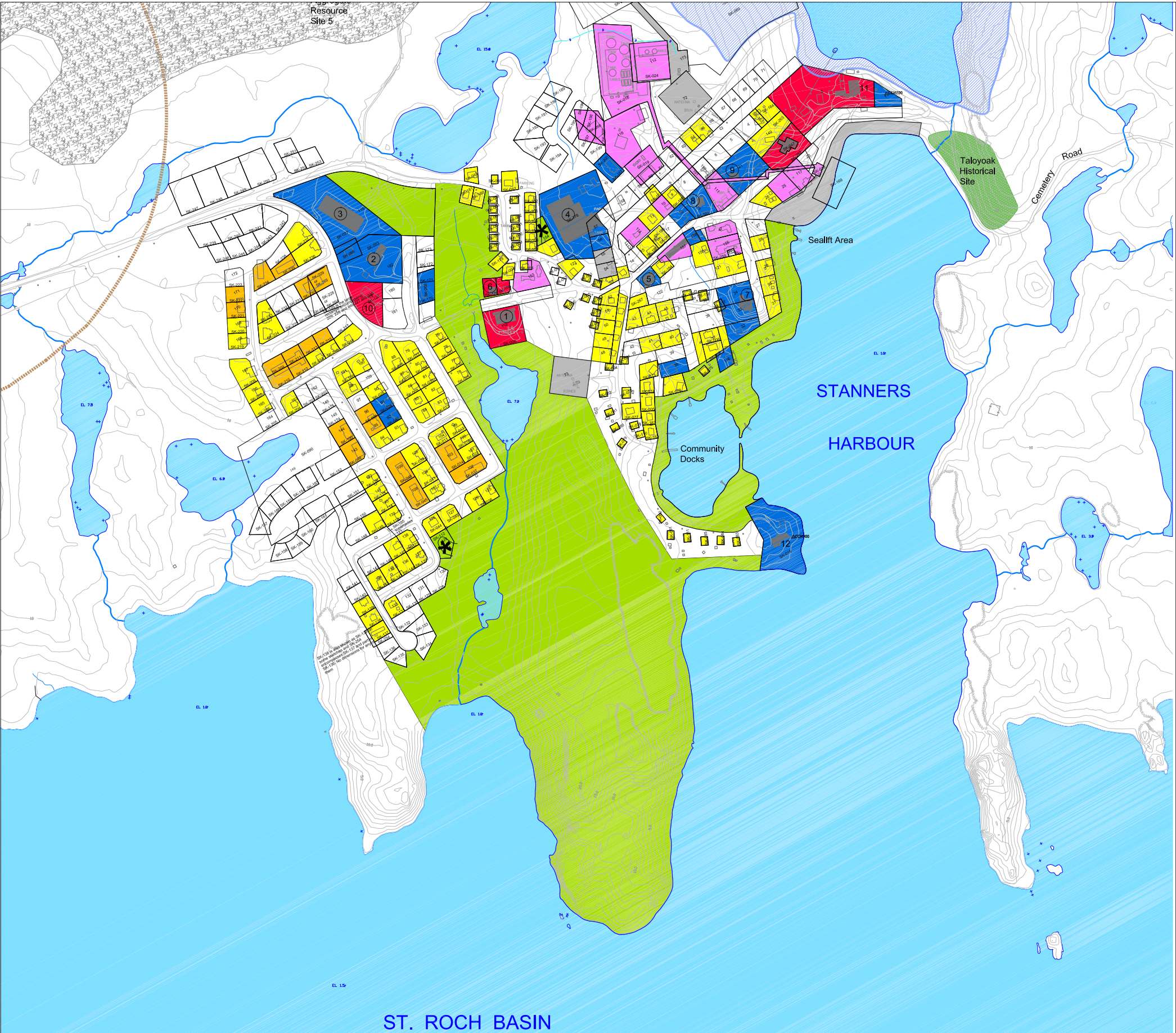
Government of Nunavut, 2004. "Pinasuaqtavut 2004-2009: Our Commitment to Building Nunavut's Future."

Nuna Burnside Engineering and Environmental Ltd. March 2009. "Aggregate Resources Evaluation, Taloyoak, Nunavut: Geotechnical Engineering Research and Investigation, Kitikmeot Region, Nunavut." Produced for the Government of Nunavut, Department of Community and Government Services.

Nunavut Economic Forum. August 2008. "Nunavut Economic Outlook." Authored by Graeme Clinton and Stephen Vail for the Nunavut Economic Forum.

## **APPENDIX 1 – EXISTING LAND USE MAP**





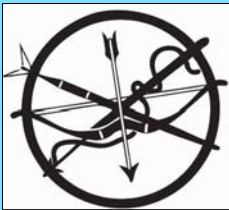
**LEGEND**

- 1 Co-op Store
- 2 Nursing Station
- 3 Community Hall
- 4 School
- 5 Hamlet Office
- 6 Arctic College
- 7 RCMP
- 8 Power Plant
- 9 Anglican Church
- 10 Boothia Inn
- 11 Northern Store
- 12 Catholic Church
- 13 Airport

- SURVEYED LOT LINES
- - - PROPOSED LOT LINES
- BUILDING FOOTPRINT
- CEMETERY
- AGGREGATE RESOURCE

**LEGEND**

- Low Density Residential
- Medium Density Residential
- Commercial
- Public / Institutional
- Industrial
- Transportation and Communication
- Open Space / Recreation
- \* Playground



Hamlet of Taloyoak