

# North Slope Borough

## Point Hope Village Profile



*Prepared for:*  
The North Slope Borough

*Prepared by:*  
URS Corporation



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## Abbreviations

ADEC .....	Alaska Department of Environmental Conservation
AEWC .....	Alaska Eskimo Whaling Commission
ANCSA.....	Alaska Native Claims Settlement Act
CB .....	citizen's band
CIP .....	Capital Improvement Program
ICAS.....	Inupiat Community of the Arctic Slope
kW .....	kilowatt
NSB.....	North Slope Borough
PWD.....	Public Works Department
SPCC .....	Spill Prevention Control and Countermeasure
USDW .....	Unified School District Warehouse
UST .....	underground storage tank

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# North Slope Borough

## Point Hope Village Profile

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## 4.6 Point Hope Village Profile

### 4.6.1 Summary

Inupiat people have continually inhabited the Point Hope peninsula perhaps longer than any other location in Alaska. These settlements included Old and New Tigara, Ipiutak, Jabbertown, and the present-day community of Point Hope. Sod house remains, house pits, and other signs of thousands of years of occupancy may be found adjacent to the present-day community. Point Hope is located near the tip of the Lisburne Peninsula, on a large gravel spit that extends approximately 15 miles into the Chukchi Sea (Figure B-1).

The history of Point Hope was strongly influenced by whaling, trading, introduction of alcohol and diseases, reindeer herding, missionaries, and federal agencies. Point Hope was incorporated in 1966 as a fourth-class city and achieved status as a second-class city in 1972. The community moved to its present-day location in 1978 and 1979, due to storm surge and erosion of the prior site on the north side of the spit. Tikigaq Corporation is the local village corporation. The Native Village of Point Hope is a federally recognized tribe.

Point Hope's population gradually increased from 1939 to 1998, when the population peaked at 805 residents. The growth pattern was fairly steady, with some plateaus and minor declines. The community's population declined in 2000, but appears to be gradually increasing again. Point Hope has a young population, with a high ratio of dependents to wage earners. At the same time, the community has high rates of unemployment and underemployment. The community has high levels of subsistence activities and use of subsistence resources.

The community infrastructure has had several upgrades in recent years. Water and sewer projects funded by the North Slope Borough (NSB) have been completed. An electric utility is functional in the community, as well as telecommunications. The North Slope Borough School District operates the Tikigaq School, which serves kindergarten through twelfth grade students. Point Hope also has a community center.

Sources: (University of Alaska - Arctic Environmental Information and Data Center 1978; Wickersham & Flavin Planning Consultants 1982; Alaska Consultants Incorporated 1983f; Shepro, Maas et al. 2003; DCED 2004)



*Aerial view of Point Hope*

#### 4.6.2 *Physical Environment*

- Point Hope is located near the tip of the Lisburne Peninsula, on a large gravel spit that extends approximately 15 miles into the sea. The spit is reportedly the “westernmost extension of Northwest Alaska into the Chukchi Sea” (Alaska Consultants Incorporated 1983f; DCED 2004).
- The community encompasses 6.3 square miles of land and 0.1 square mile of water (DCED 2004).
- The spit that Point Hope is located on is relatively flat and low-lying. The soils are well drained with a sparse cover of vegetation; soils consist primarily of sand and well-rounded gravel. Permafrost is estimated to be several hundred feet deep in the area (Alaska Consultants Incorporated 1983f).
- The climate is arctic with temperatures ranging from –49 to 79 degrees Fahrenheit. Precipitation averages 10 inches annually, with 36 inches of snow (DCED 2004).
- The physical characteristics of Point Hope are available in more detail in prior planning documents (Wickersham & Flavin Planning Consultants 1982; Alaska Consultants Incorporated 1983f).



*Coastline near Point Hope*

##### 4.6.2.1. Hazards

- With the community’s coastal location, potential natural hazards include beach erosion, flooding, storm tides, ice override, and subsidence due to permafrost melting. However, existing data are not generally available for the location and extent of hazards; potential hazard conditions should be considered further on a project-specific basis.
- There have been no recorded flood events at the present townsite (US Army Corps of Engineers 2000), but beach erosion and flooding due to coastal surge are of great concern to the community. Flood potential, based on wave height, is illustrated in Figure V-19.
- A high priority for the community is to construct an evacuation road so that residents may safely move to higher ground if high waves or other storm events are forecast.
- Offloading equipment, fuel, and supplies from barges is becoming a hazardous task as ocean characteristics change.
- Human-caused environmental hazards include potentially contaminated sites. Alaska Department of Environmental Conservation (ADEC) has the following 17 sites in Point



Hope listed in their contaminated sites database (Table 4.6-1) (ADEC 2004). ADEC also has one site in Point Hope listed in their underground storage tank (UST) database (Table 4.6-2).

- In addition to the potentially contaminated sites in Point Hope, there are known contaminated sites in Cape Thompson (south of the community) and Cape Lisburne (north of Point Hope). Both sites were used by the military; clean-up of contaminated sites in these areas is incomplete to date. The Project Chariot site is six miles southeast of Cape Thompson, which contained radioactive materials from the Atomic Energy Commission operations in the area from 1958 to 1963. Radioactive materials were removed in 1993 and site closure was approved. A report on the Project Chariot clean-up is available online in the ADEC Contaminated Sites Database.



*Material storage site*

**Table 4.6-1  
Potentially Contaminated Sites in Point Hope**

Site Name	Location	Status	Reckey
AKARNG Point Hope FSA	Unnamed Road, Point Hope, AK 99766	No Further Remedial Action Planned	1998310103001
Cape Lisburne LRRS (LUST)	Cape Lisburne, Point Hope, AK 99766	Active	199131X024801
Cape Lisburne LRRS Dump No. 2	South Side of Upper Camp, Point Hope, AK 99766	Active	199331X119604
Cape Lisburne LRRS Fuel Spill	Cape Lisburne, Point Hope, AK 99766	Active	198331X133707
Cape Lisburne LRRS Landfill	Cape Lisburne, Point Hope, AK 99766	Active	198331X933706
Cape Lisburne LRRS LC Transformer	Cape Lisburne, Point Hope, AK 99766	Active	198331X933705
Cape Lisburne LRRS Runway/Rd Oiling	Gravel Roads & Runway, Point Hope, AK 99766	Active	199331X119601
Cape Lisburne LRRS Spill/Leak No. 1	Lower Camp, Point Hope, AK 99766	Active	199331X119602
Cape Lisburne LRRS Spill/Leak No. 2	Runway, Point Hope, AK 99766	Active	199331X119603
Cape Lisburne LRRS UC Transformer	Cape Lisburne, Point Hope, AK 99766	Active	198331X933704
Cape Lisburne LRRS White Alice Site	Cape Lisburne, Point Hope, AK 99766	Active	198331X933703
Point Hope DMS Bldg. Holding Tank	Point Hope, Point Hope, AK 99766	Inactive	1996310119702
Point Hope Drum Storage Area	South End of Village, Point Hope, AK 99766	Inactive	1992310921303
Point Hope Gasoline Line	Point Hope, Point Hope, AK 99766	Inactive	1992310907701
Tikigaq School Diesel Holding Tank	Point Hope, Point Hope, AK 99766	Inactive	1996310119701
Tuttu Street Trench	Tuttu Street, Point Hope, AK 99766	Inactive	1998310132101
U.S. Postal Service - Point Hope	1234, Point Hope, AK 99766	Inactive	1995310132501

Source: (ADEC 2004)

**Table 4.6-2  
Point Hope Underground Storage Tank**

Event ID	Reckey	Facility ID	Site Name	Location	Owner
1 27	'199136X024801'	774	Cape Lisburne LRRS	Cape Lisburne; Point Hope, North Slope	611 Ccs/cc Elmendorf AFB

Source: (ADEC 2004)

### 4.6.3 Human Environment

- “Point Hope peninsula is one of the longest continually occupied Inupiat sites in Alaska and consisted of many individual settlements over a period of time, including Old and New Tigara, Ipiutak, Jabbertown, and present Point Hope” (University of Alaska - Arctic Environmental Information and Data Center 1978; DCED 2004).
- The history of Point Hope was strongly influenced by whaling, trading, introduction of alcohol and diseases, reindeer herding, missionaries, and federal agencies (Alaska Consultants Incorporated 1983f).
- Point Hope was incorporated in 1966 as a fourth-class city and achieved status as a second-class city in 1972 (Alaska Consultants Incorporated 1983f).
- The community moved to its present-day location in 1978 and 1979, due to storm surge and erosion of the prior site on the north side of the spit (Alaska Consultants Incorporated 1983f).
- The Native Village of Point Hope is a federally recognized tribe, with large land holdings in the area.
- Tikigaq Corporation is the local Alaska Native Claims Settlement Act (ANCSA) village corporation.

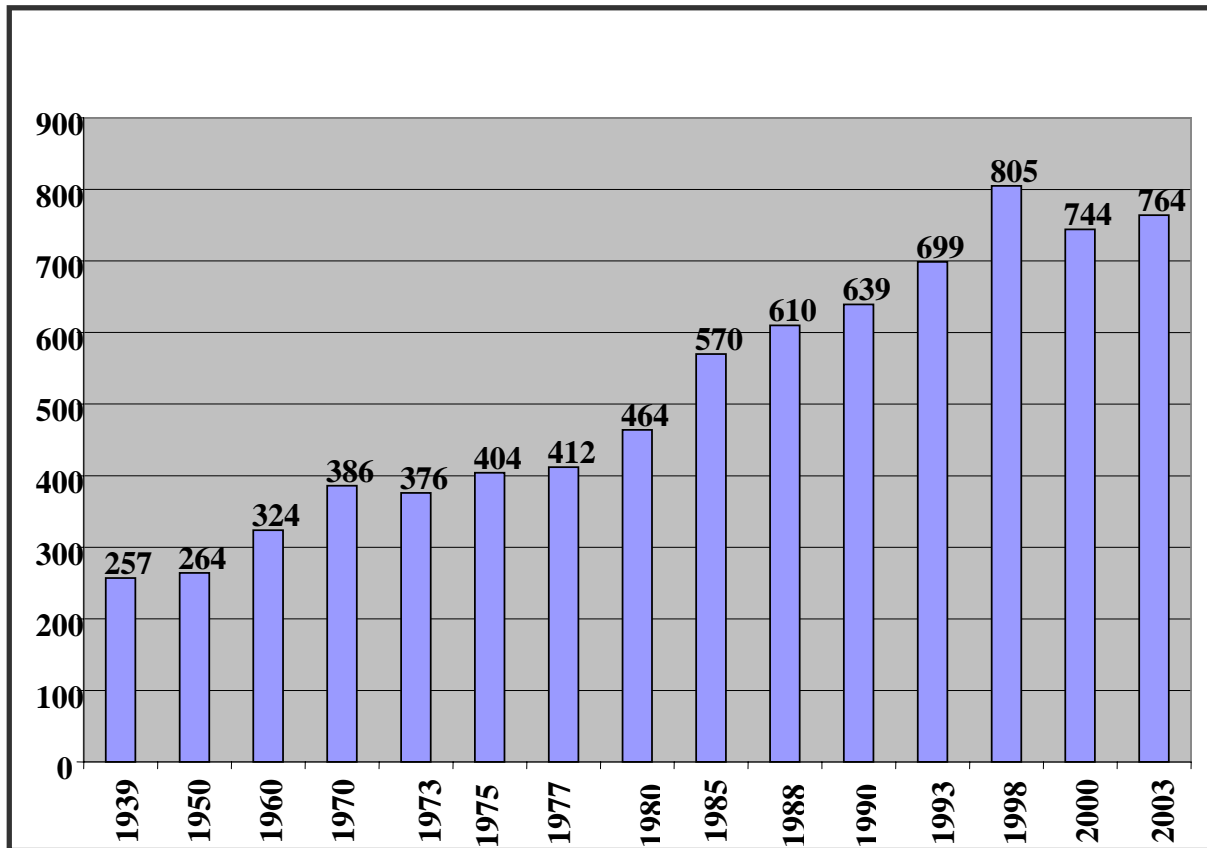


Point Hope Post Office

#### 4.6.3.1. Population

- Point Hope’s population gradually increased from 1939 to 1998. Then the population declined in 2000, but appears to be gradually increasing in 2003 (Shepro, Maas et al. 2003). Refer to Figure 4.6-1.
- Point Hope has a young population; average ages in the community are less than in the state or nation (Table 4.6-3). The proportion of the population under the age of 17 is also greater than in the state or nation (Shepro, Maas et al. 2003).
- While the population in Point Hope is over 90 percent Inupiat, the percentage of non-Inupiat residents has increased in recent years to 8.8 percent. The 2003 census found Point Hope to have the greatest number of non-Inupiat residents in the North Slope communities outside of Barrow (Shepro, Maas et al. 2003).

**Figure 4.6-1  
Point Hope Population from 1939 to 2003**



Source: (Shepro, Maas et al. 2003)

**Table 4.6-3  
Comparison of Age Cohorts in Point Hope, Alaska, and the United States\***

Age Groupings	Point Hope	Alaska	U.S.
% 17 Yrs. & Under	43.4%	30.4%	25.7%
% 65 Yrs. & Over	4.9%	5.7%	12.4%

Note: \*Results include only those individuals responding to the census survey and the question concerning age.

Source: (Shepro, Maas et al. 2003)

#### 4.6.3.2. Economy

- The North Slope Borough, Tikigaq Corporation, and the North Slope Borough School District are the primary employers in the community (Shepro, Maas et al. 2003; DCED 2004).
- The unemployment rate in Point Hope was estimated at approximately 18 percent in the 2003 census, which is higher than the rate for the state (8 percent) or nation (6 percent) in a similar timeframe (Shepro, Maas et al. 2003). Refer to Table 4.6-4.

- The Tikigaq Corporation Store provides local commercial goods, including groceries, general merchandise, propane, diesel fuel, and gasoline. There is also a locally owned store in the community.
- Craft sales are an important part of the economy in Point Hope. The 2003 census noted that over 21 percent of the households earned income from selling crafts in 2003, and the level of income earned was notably higher than in most other communities (Shepro, Maas et al. 2003). Whalebone masks, baleen baskets, ivory carvings and traditional clothes are common crafts in the community.



Example of local crafts

**Table 4.6-4**  
**Point Hope: Labor Force Comparison, 1998 and 2003\***

Employment Type	1998		2003	
	Number	Percent	Number	Percent
<b>Permanent full-time</b>	134	43.9%	136	42.2%
<b>Temporary/Seasonal</b>	53	17.4%	43	13.4%
<b>Part-Time</b>	37	12.1%	47	14.6%
<b>Unemployed</b>	81	26.6%	57	17.7%
<b>Retired</b>	NA	NA	39	12.1%
<b>Total</b>	305	100%	322	100%

Note: \*Results include only those individuals responding to the census survey and the question about employment type in both 1998 and 2003.

Source: (Shepro, Maas et al. 2003)

#### 4.6.3.3. Subsistence

- “The people of Point Hope consider themselves first and foremost a whaling culture. The village’s close proximity to lead systems allows access to migrating bowhead and beluga whales. However, bowhead whales alone do not support the entire village and villagers rely on other resources as well” (Fuller and George 1997).
- Approximately 93 percent of the households in Point Hope participate in the local subsistence economy; the participation rate for Inupiat residents was recorded at approximately 99 percent (Shepro, Maas et al. 2003). Refer to Table 4.6-5. The subsistence lifestyle remains a primary cultural choice for Native households.
- In 2003, approximately two-thirds of all Point Hope residents said that half or more of their diet consisted of local subsistence resources, while three-quarters of all Inupiat residents were heavily reliant on subsistence resources (half or more of their diet comes from local foods) (Shepro, Maas et al. 2003). Refer to Table 4.6-5.
- Employment status and income level do not appear to substantially affect Point Hope residents’ level of reliance upon subsistence resources. Nearly 80 percent of Inupiat households with full-time employment were classified as heavily reliant on subsistence

resources in 2003. Inupiat residents that were unemployed or held part-time employment also had high levels of subsistence reliance (Shepro, Maas et al. 2003).

- There appears to be a shift in the sharing patterns for subsistence resources (Shepro, Maas et al. 2003). The majority of sharing occurs within the village; there was a decrease noted for sharing with other North Slope villages and an increase in sharing with urban residents.
- Nearly half of Point Hope residents (47.5 percent) spent less than \$1,200 on subsistence activities, however 15 percent of residents spent between \$9,600 and \$20,000 (Shepro, Maas et al. 2003). Average subsistence expenditures were not calculated for the community in 2003. Subsistence expenses include items such as fuel, ammunition, and other supplies needed to participate in subsistence activities.
- Subsistence activities occur year-round, with seasonal emphases. Preparation for whaling can occur year-round, but hunting for bowheads and belugas usually occurs in the spring and early summer. It is typical for Point Hope whaling crews to harvest whales two weeks earlier than in Barrow. Seal hunting occurs through most of the year, with the general exception of September and October. Walrus hunting often peaks in the early summer months. Caribou are also an important resource that is hunted throughout the year, with peak activities in August and September, when the animals are in prime condition. Fish are harvested in the open water during summer months, as well as under ice in the fall and winter (University of Alaska - Arctic Environmental Information and Data Center 1978; Fuller and George 1997).
- Subsistence harvest data for the community of Point Hope indicate that marine mammals comprised over three-quarters of the harvest by weight (77 percent), including belugas, bowheads, walrus and seals (Fuller and George 1997). Caribou have historically been, and remain, an important subsistence resource for the community; in the 1997 study, caribou were the only non-marine mammals species in the top five species harvested for the year. Refer to Table 4.6-6.
- A generalized illustration of the distribution of subsistence uses is displayed in Figure B-5. The associated maps of wildlife habitat and distribution (Figures B-6 through B-11) illustrate areas that are important for subsistence resources. All project proponents should consult with the Borough, communities, and tribes regarding current subsistence activities and locations, due to seasonal and annual variations of the resources.



*Whale rib tripod in Point Hope*

**Table 4.6-5**  
**Amount of Food Consumed Harvested From Local Sources in Point Hope \***

Amount	1998		2003	
	Number	Percent	Number	Percent
<b>None</b>	4	2.9%	10	7.0%
<b>Very Little</b>	11	8.2%	16	11.3%
<b>Less Than Half</b>	23	17.2%	23	16.2%
<b>Half</b>	34	25.4%	28	19.7%
<b>More Than Half</b>	34	25.4%	30	21.1%
<b>Nearly All</b>	19	14.2%	15	10.6%
<b>All</b>	9	6.7%	20	14.1%
<b>Total</b>	134	100%	142	100%

Note: \*Results include only those households responding to the census survey, and the query about the amount of subsistence harvested by the household.

Source: (Shepro, Maas et al. 2003)

**Table 4.6-6**  
**Top Five species Harvested at Point Hope, Alaska during calendar year 1992**

Species	Edible Pounds Harvested	Number Harvested	Pounds Per Household	Pounds Per Capita	Percent of Total Harvest
Beluga	137,172	98	879	196	40.3
Walrus	55,797	72	358	80	16.4
Bearded Seal	28,242	160	181	40	8.3
Caribou	26,303	225	169	38	7.7
Bowhead	23,365	3	150	33	6.9

Source: (Fuller and George 1997)

#### 4.6.3.4. Income

- The average household income for Point Hope was calculated to be \$53,835 (Shepro, Maas et al. 2003). However, the average household income for Inupiat residents was lower, at \$43,943, and the average household income for non-Inupiat was much higher at \$85,216. The per capita income figures varied similarly. Average incomes in the community rose by approximately 14 percent, while the average Inupiat household income fell by approximately 4 percent. Refer to Table 4.6-7.
- Average incomes in the community rose by approximately 14 percent, while the average Inupiat household income fell by approximately 4 percent. However per capita incomes increased dramatically for all categories (Shepro, Maas et al. 2003). Refer to Table 4.6-7.
- The 2003 census (Shepro, Maas et al. 2003) reported that 21 Point Hope households (all Inupiat) are below the poverty threshold. This represents approximately 22 percent of the Inupiat households that responded to the census and provided their total household income (Shepro, Maas et al. 2003).
- Approximately 21 percent of Point Hope households receive income from craft sales; the average reported income from craft sales is \$2,373 (Shepro, Maas et al. 2003), including items such as whalebone masks, baleen baskets, and clothing items.

**Table 4.6-7  
Point Hope: Average Household and Per Capita Income\***

Category	1993	1998	2003
<b>Household Income, All</b>	\$41,581	\$46,437	\$53,835
<b>Household Income, Inupiat</b>	\$35,697	\$45,732	\$43,943
<b>Household Income, non-Inupiat</b>	\$79,999	\$51,643	\$85,216
<b>Per capita Income, All</b>	\$9,305	\$10,885	\$27,202
<b>Per capita Income, Inupiat</b>	\$7,462	\$10,739	\$22,128
<b>Per capita Income, non-Inupiat</b>	\$33,170	\$20,750	\$50,154

Note: \*Results include only those responding to the census survey and providing information about per capita and total household income.

Source: (Shepro, Maas et al. 2003)

#### 4.6.3.5. Housing

- The 2003 census (Shepro, Maas et al. 2003) estimated that approximately 88 percent of Point Hope households live in single-family dwellings. The remaining households live in trailers or multi-unit structures. Refer to Table 4.6-8. The community had 215 housing units, with 186 occupied and 29 vacant (DCED 2004). Twenty-two of the 29 vacant units are vacant due to seasonal use.
- Diesel oil is the primary heat source for approximately 97 percent of the community, with forced air furnaces (32 percent) and baseboard/boiler systems (40 percent) serving the majority of Point Hope households (Shepro, Maas et al. 2003). Refer to Table 4.6-9.

**Table 4.6-8  
Point Hope: Comparison of Housing Unit Types, 1998 and 2003\***

Type Of Housing Unit	1998		2003	
	Number	Percent	Number	Percent
<b>Mobile Home/Trailer</b>	27	17.9%	12	7.7%
<b>One-Family House</b>	119	78.8%	138	87.9%
<b>Building For 2 Families</b>	4	2.6%	1	0.6%
<b>Building For 5 or More Families</b>	1	0.7%	5	3.2%
<b>Other</b>	0	0.0%	1	0.6%
<b>Total</b>	151	100%	157	100%

Note: \*Results include only those households responding to the census survey and the question of type of housing.

Source: (Shepro, Maas et al. 2003)

**Table 4.6-9  
Point Hope: Type of Main Heating System in Household\***

Type of System in Use	1998		2003	
	Number	Percent	Number	Percent
<b>Stand-Alone Stove</b>	NA	NA	18	11.5%
<b>Stand-Alone Heater</b>	55	35.7%	16	10.3%
<b>Forced-Air Furnace</b>	61	39.6%	50	32.1%
<b>Baseboard/ Boiler System</b>	30	19.5%	62	39.7%
<b>Other</b>	8	5.2%	10	6.4%
<b>Total</b>	154	100%	156	100%

Note: \*Results include only those households responding to the census survey and the type of heating system used in the household. †The Stand-Alone Heater category included Stand-Alone Stoves in 1998.

Source: (Shepro, Maas et al. 2003)



#### 4.6.4 *Land Ownership and Land Use*

##### 4.6.4.1. Land Ownership

- The Tigara Corporation (now Tikigaq) selected lands throughout the Point Hope spit, including the old and new village sites. Point Hope moved to its present location in 1978 and 1979, even though there was no formal agreement between the corporation and the city for 14(c)(3) land conveyances. Land transfers occurred via quitclaims, as the corporation had not received patent to the lands (Alaska Consultants Incorporated 1983f; DCED 2004). The village corporation transferred land title to the tribe in 1984.
- Several Native allotment applications are still pending in the Point Hope area; official surveys are still pending on some of the applications.
- Tikigaq Corporation has the right to select 138,240 acres of federal land in the Point Hope area. Land status records indicate that 341 acres have been conveyed to the corporation; interim conveyances are pending for 121,798 acres. The remaining entitlement for Tikigaq Corporation stands at 16,101 acres (BLM 2005). Land conveyances to the city for 14(c)(3) properties are still incomplete (DCED 2004).
- Arctic Slope Regional Corporation owns the subsurface rights to the Tikigaq Corporation lands, as well as additional lands in the area.
- In Point Hope, as in other North Slope villages, accurate information regarding the status of title for individual lots is not always available (Alaska Consultants Incorporated 1983f). This can cause problems in land conveyances.

##### 4.6.4.2. Land Use

- Point Hope is zoned a Village District in the North Slope Borough Comprehensive Plan (Wickersham & Flavin Planning Consultants 1982). Regulations and guidelines for land uses allowed within Village Districts may be found in the Borough Land Management Regulations (1990). Borough zoning districts are displayed in Figure B-3.
- A variety of traditional land uses occur within and adjacent to the community for subsistence and cultural purposes. Important use areas should be identified on a project-specific basis.
- Land uses are divided into four general categories: residential, public and semi-public, commercial, and industrial (Figure V-17). These land use classifications are based on observations and community input. There are no legal zoning districts within the community at this time.
- **Residential** – The community has both single-family and multi-family housing units. Residential areas surround the central portion of the community, with proposed expansion to the northwest and southeast.



*Flags flying at a Point Hope home*

- **Public and Semi-public** – Public and semi-public buildings and facilities are located throughout the community, but are predominantly located in the center of the community. These buildings and facilities include the church, fire station, government buildings, health clinic, police station, senior center, and school.
- **Commercial** – Office buildings, stores, and other businesses are generally located on the southwest side of the central section of town.
- **Industrial** – Industrial land uses typically occur on the southwest side of town, as well as on the perimeter. Industrial land uses include the airport, fuel storage tanks, landfill, power plant, telecommunications facilities, and wastewater treatment facilities.

#### 4.6.5 *Community Facilities and Utilities*

##### 4.6.5.1. Facilities

- A health clinic, staffed by community health aides, is open each day and is available 24 hours a day for emergencies.
- Community facilities include the city hall, police station, fire station, senior center, and day care center.
- The fire department is equipped with a pumper apparatus and a pumper/water tender



*Point Hope Health Clinic*

- apparatus, capable of pumping 1,250 gallons per minute (gpm) and 750 gpm of water respectively, for a total of 2,000 gpm of water (Steurmer 2005).
- Critical facilities in Point Hope are identified in Figure V-16.

##### 4.6.5.2. Water

- A piped water system was constructed in 1999. The system is operational, with 9,800,000 gallons of storage capacity (Grinage 2004).
- The NSB Public Works Department (PWD) provides the operations and maintenance for piped water system, and operates the water haul system (Grinage 2004).
- Water is derived from a surface water source, a lake seven miles to the east, treated and stored in a tank. Some residents have water delivered from a central watering point and stored in household tanks to provide running water for kitchen.
- Water is treated by micro and nano filtration.
- There are 15 fire hydrants in the community. Hydrants are spaced 720 feet apart, which is greater than the 500-foot maximum allowable distance in the International Fire Code (Steurmer 2005).
- The maximum water flow in the community is approximately 1,250 gallons per minute, which would not meet the needs of large fire situations. For example, a fire in a large

structure that does not have a sprinkler system, such as a store or equipment shop would require a water flow in excess of 2,000 gpm. In structures that have a sprinkler system, such as the school, the sprinkler system would demand a flow of 1,000 gpm, and the hydrant flow demand would be an additional 1,000 gallons per minute (Steurmer 2005).



*Water storage tanks*

#### 4.6.5.3. Sewer

- The sewer system was constructed in 1999. In 2003, over 90 percent of households had flush toilets hooked to a sewer line while those that depend on truck hauled water have a holding tank.
- The NSB PWD provides the operations and maintenance for piped sewer system, and also operates the sewer haul system (Grinage 2004).
- Information obtained from the Wastewater Discharge Permit dated January 2002 indicates the wastewater treatment plant chlorinates filtered domestic wastewater prior to discharge into a sewage lagoon located approximately 600 feet west of the wastewater treatment plant. Additionally, lesser quantities of industrial/commercial wastewater are disposed of similarly.

#### 4.6.5.4. Solid Waste

- NSB provides trash and sewage pick-up.
- Refuse is collected by and disposed of at the NSB operated landfill. The landfill is located one-half mile east of the airstrip and one mile southwest of Point Hope. The Class III landfill has a current permit, and typical contributions are unspecified. This landfill was built in 2000 and is anticipated to have a design life of 10 years. 1708 cubic yards per year of waste are expected. The components of the new facility include a salvage area, burn cage, honey bucket lagoon, and used drum storage area (Demientieff 2004).

#### 4.6.5.5. Power

- Diesel oil remains the primary source of heat for Point Hope households, regardless of the main heating system in use (Shepro, Maas et al. 2003).
- The NSB Power and Light System operates the local electric utility. Electricity is generated using diesel fuel and transmitted to housing via above-ground transmission lines (Grinage 2004).
- The rate schedule for use between one and 600 kilowatts (kW) is 15 cents per kW hour; use over 600 kW is 35 cents per kW hour (Grinage 2004).
- The community has a 2,400/4,160 Volt Distribution System with a 2,925 kW generation capacity. The system generated 6,661,000 kW hour in fiscal year 2004 (Grinage 2004).
- Point Hope receives a power cost equalization subsidy (Grinage 2004).

#### 4.6.5.6. Fuel Oil/Petroleum

- Tikigaq Corporation is the operations and maintenance contractor for NSB PWD.
- The community has multiple bulk storage, intermediate, and day tanks for fuel storage scattered throughout the village (Table 4.6-10). All fuel storage tanks are connected above ground. Fuel is distributed via pipeline and truck depending on whether the recipient is commercial or residential. All tank information is based on a 2004 assessment that the NSB compiled for updating their Spill Prevention Control and Containment (SPCC) plans (Piedlow 2004).

**Table 4.6-10  
Point Hope Fuel Tanks**

Tank Location	Tank Description or Number	Year Installed	Type of Fuel	Tank Capacity (gallons)
<b>COMMERCIAL</b>				
Tank Farm & Gas Station	PHO-01	Rebuilt 1997	Diesel	500,000
	PHO-02	Rebuilt 1997	Diesel	350,000
	PHO-03	Rebuilt 1997	Diesel	250,000
	PHO-04	Rebuilt 1997	Gasoline	150,000
	Dispensing	1997	Diesel	6,000
	Dispensing	1997	Diesel	6,000
USDW Bldg	PHO-05	1983	Diesel	11,000
	Tank #1	1983	Diesel	6,000
	Tank #2	1983	Diesel	6,000
	Tank #3 (Day tank)	1983	Diesel	250
	Tank #4 (day tank)	1983	Diesel	250
	Tank #5 (day tank)	1983	Diesel	250
Fire Department	Tank # 1		Diesel	7,270
	Tank # 2 (Day tank)		Diesel	275
Housing Maintenance Building	Tank #1	Unknown	Diesel	100
Old Sewage Treatment Bldg	Tank #1	Unknown	Diesel	500
Water Treatment Plant	Tank #1	1979	Diesel	500
Generator Building	PHO-PP	1997	Diesel	10,500
	Tank #1(Day tank)	1995	Diesel	275
	Tank #2 (Day tank)	1995	Diesel	300
Health Clinic	Tank #1	2000	Diesel	564
Point Hope School	Tank #1		Diesel	20,000
	Tank #2 (Day tank)		Diesel	100
	Tank #3 (Day tank)		Diesel	100
School Garage & Storage Building	Tank #1	1994	Diesel	500
Warm Storage Building	Tank #1	1989	Diesel	5,264
	Tank #2	1089	Diesel	500
Public Safety Office Bldg	Tank #1	1999	Diesel	250
Search & Rescue	Tank #1	1999	Diesel	1,000
Heavy Equipment Shop	Tank #1	1999	Diesel	7,000
Sewage Treatment Bldg	Tank #1	2000	Diesel	2,000
New Water Treatment Building	Tank #1	2000	Diesel	2,000
DMS Washeteria	Tank #1	Unknown	Diesel	1,000
<b>RESIDENTIAL</b>				
Single-Family Residence (Blk 3, Lot 5)	Tank #1	1989	Diesel	250
Single-Family Residence (Blk 2, Lot 6A)	Tank #1	1980	Diesel	250
Single-Family Residence (Blk 5, Lot 10)	Tank #1	Unknown	Diesel	250

**Table 4.6-10 (continued)  
Point Hope Fuel Tanks**

Tank Location	Tank Description or Number	Year Installed	Type of Fuel	Tank Capacity (gallons)
Single-Family Residence (Blk 13, Lot 9)	Tank #1	Unknown	Diesel	300
Teacher Housing #1	Tank # 1	1993	Diesel	250
Teacher Housing #2	Tank # 1	1993	Diesel	250
Teacher Housing #3	Tank # 1	1994	Diesel	250
Teacher Housing #4	Tank # 1	1993	Diesel	250
Teacher Housing #5	Tank #1	1993	Diesel	250
5-Plex (Blk 7, Lot 3A)	Tank # 1	1985	Diesel	1,128
Single-Family Residence (Blk 10, Lot 5)	Tank #1	1976	Diesel	750
Single-Family Residence (Blk 11, Lot 14)	Tank # 1	Unknown	Diesel	250
Single-Family Residence (Blk 16, Lot 6)	Tank # 1	Unknown	Diesel	250
Single-Family Residence (Blk 19, Lot 4)	Tank # 1	Unknown	Diesel	250
Single-Family Residence (Blk 27, Lot 7A)	Tank # 1	1996	Diesel	300
Single-Family Residence (Blk 27, Lot 6A)	Tank # 1	1996	Diesel	300
Single-Family Residence (Blk 20, Lot 7)	Tank # 1	1978	Diesel	300
Single-Family Residence (Blk 28, Lot 3)	Tank # 1	1996	Diesel	300
Single-Family Residence (Blk 28, Lot 2A)	Tank # 1	1996	Diesel	300
Single-Family Residence (Blk 28, Lot 1A)	Tank # 1	1996	Diesel	300
Single-Family Residence (Blk 21, Lot 15A)	Tank # 1	1984	Diesel	300
Single-Family Residence (Blk 29, Lot 2)	Tank # 1	1996	Diesel	300
Single-Family Residence (Blk 29, Lot 3)	Tank # 1	1996	Diesel	250
Single-Family Residence (Blk 29, Lot 4)	Tank # 1	1996	Diesel	250
Single-Family Residence (Blk 29, Lot 5)	Tank # 1	1996	Diesel	250
Single-Family Residence (Blk 29, Lot 6)	Tank # 1	1996	Diesel	250
Single-Family Residence (Blk 22, Lot 5)	Tank # 1	1983	Diesel	250
Single-Family Residence (Blk 22, Lot 7)	Tank # 1	1985	Diesel	300
Single-Family Residence (Blk 22, Lot 14)	Tank # 1	Unknown	Diesel	300
Single-Family Residence (Blk 22, Lot 13)	Tank # 1	Unknown	Diesel	250
Single-Family Residence (Blk 23, Lot 12)	Tank # 1	Unknown	Diesel	250
Single-Family Residence (Foam Panel #1)	Tank # 1	2000	Diesel	250
Single-Family Residence (Foam Panel #2)	Tank # 1	2000	Diesel	250

Source: (Piedlow 2004)

#### 4.6.6 *Communication Infrastructure*

Telecommunications facilities serving Point Hope include a fully digital local exchange telephone service, local dial-up Internet, widely-used citizen's band (CB) radio, cable television, KBRW public radio broadcast, and the community access public teleconferencing center. Interconnection with the public, switched telecommunications network is via satellite circuits, which currently present a limitation to the residents needing access to higher bandwidth services, especially the Internet. The NSB, in coordination with the NSB School District, leases private satellite circuits and maintains a "long-distance" network in order to provide distance education, tele-health and support for governmental service administration in the community (Arctic Slope Telephone Association Cooperative 2004).



*Satellite facilities in Point Hope*

#### 4.6.7 *Natural Gas*

No energy conversions from diesel to natural gas are planned at this time. Past gas exploration showed insufficient quantities to make gas a viable option at current development costs for gas production (Piedlow 2004).

#### 4.6.8 *Community Issues*

Issues, concerns, and comments were gathered during visits to the community in 2004 and 2005 for the Comprehensive Plan revision process. Comments identified at the meetings were grouped by the topics used to organize the Comprehensive Plan. There is a range of concerns identified for the community, and the list should be reviewed and updated annually for planning purposes.

##### **Land Ownership and Status**

- The village corporation transferred land title to the tribe in 1984. This ownership status needs to be recognized.
- When ownership was transferred from the old townsite to the new one, some lots did not get the restricted status. Restricted lots appear to be exempt from the Borough property tax, and receipt of status has implications for lot owners.
- People felt that Native allotments should have subsurface rights.

##### **Land Use**

- In response to an issue listed on the wall, the following question was raised: How large of a buffer zone is permitted by the Alaska Eskimo Whaling Commission (AEWC) and the NSB Wildlife Department? Measures currently used by AEWC and the Borough, such as seasonal restrictions, the Conflict Avoidance Agreement and the Good Neighbor Policy were also discussed.
- There is a need for increased coordination between the Borough and villages before permits are issued for development. There was a concern about potential impacts to subsistence use areas.

##### **Fish and Wildlife/Subsistence**

- What is happening to fall whale migration past Point Hope, and is it being affected by oil and gas development? People felt that there were fewer whales.
- Mineral exploration and mine operation has impacted subsistence caribou hunting, and there should be compensation for the cost of gas expended in unsuccessful subsistence hunts. The question of how many miles a buffer zone could/should cover was raised again.
- Helicopters from exploration for resource development impact caribou, ptarmigan, and other fish and wildlife. We need conflict avoidance agreements.

## Human and Cultural Resources

- We are losing our native language. We need an immersion program in each village, not just in Barrow. There are barriers to starting immersion programs, including the No Child Left Behind Act and the testing requirements in English.

## Hazards

- The Borough should coordinate with the tribe, corporation, and city to resolve the emergency evacuation plan. The proposed evacuation road out of the village on the low-lying spit is a high priority for the community.

## Socioeconomic Factors

- The Borough should research and address social and economic impacts due to oil and gas development.
- Funding for education is very important.
- Scholarships and funding assistance are needed for college students.
- The Borough should give a priority hiring preference for college students to help struggling students with job opportunities.
- Housing is an issue; there are not enough homes available. Multiple generations occupy a single structure. Local people cannot afford rentals; outsiders take the rentals.
- There are sewer leaks outside of homes that are not being repaired. This is a health hazard and may be one of the many ties to the water shortage in the community.
- An apprenticeship program was started about five years ago, but only a few people have been certified. We need electricians, plumbers, teachers, lawyers, and all trades.
- There needs to be more local hire in the community (an example of Health Aides was discussed).
- Ilisagvik College needs to focus on on-the-job training and outplacement services. Our students are not getting hired.
- Local tribes and corporations need to select for local hire.
- The Borough needs to work with communities and tribes to identify grants and funding sources, including funds for training.

## Public Services, Facilities, and Government

- The existing Senior Center is closed. People felt that there were promises for a new center, but it has never materialized.
- A youth facility is needed to combat drug, alcohol, and vandalism issues.
- Property taxes are an excessive financial burden. There are few jobs in the community and no way to pay the taxes.
- The corporation transferred land title to the tribe. There was a question about the tax status of this land.



- 202 Housing Grants are needed to provide affordable housing in the village, and the delays are causing hardship under current economic conditions in the villages.
- The North Slope Borough does not have a tribal policy of full cooperation and non-interference; the Borough needs a policy that they respect and obey tribal policies.
- There is a desperate need for a tribal policy so that the tribes can collect royalties from the off-shore petroleum operations.
- The evacuation road is not progressing because the Borough did not provide statements of non-objection; the funds need to come to the Tri-Lateral Committee in Point Hope.
- The evacuation road is still the number one priority for the Tri-Lateral Committee.
- We need additional public safety officers in the community.
- The washeteria is needed; houses do not have washer and dryer hookups.
- The Borough promised grant writers to help the community, but that help never materialized.
- There should be two weeks' advance notice for community meetings.

### **Petroleum and Mineral Development**

- Issues related to resource development were addressed under the several of the topics above, such as subsistence, socioeconomics, and land use.
- Tribes need to be involved in Good Neighbor Policies and Conflict Avoidance Agreements.
- Petroleum and mineral activities outside of the community and the Borough impact subsistence activities (examples were Red Dog Mine and Kennicott Mining Company exploration).
- Permittees should have to coordinate with the Inupiat Community of the Arctic Slope (ICAS), particularly where there are impacts to Native allotments and local communities.

#### **4.6.9 Community Priorities**

The following priorities have been formally identified by the village in previous recommendations, correspondence, the Borough five-year Community Improvement Program (CIP), or resolutions passed by city councils. Other community needs have been informally identified in the preceding discussion of issues.

- **Health Care** – Health care is taken care of by Maniilaq; a concern was brought up regarding health care status.
- **Materials Storage Clean-up** – When Public Works was in the community doing the water and sewer project, they left some materials behind. These materials create ongoing needs for cleanup, especially the Styrofoam as it breaks up.

The following projects for Point Hope are on the Borough's CIP list pending funding or project completion:

- Tikigaq School renovation
- Multi-curriculum classroom for the school
- Erosion control
- Road to Kuukpuk River
- Snow fence
- Northeast road expansion
- Water storage tank
- Construction trash removal from the water and sewer project
- Water and sewer system extensions

The following projects have been identified as community needs and have been requested from the Borough, but these projects are not Borough responsibilities. The community will have to seek other sources of funding.

- Kalgi renovation/expansion

#### 4.6.10 References

- (1990). North Slope Borough Land Management Regulations and Barrow Zoning Ordinances. NSB Title 19.
- ADEC (2004). Division of Spill and Response, Contaminated Sites Program. Juneau, Alaska, Alaska Division of Environmental Conservation. 2004: [http://www.state.ak.us/dec/spar/csp/db\\_search.htm](http://www.state.ak.us/dec/spar/csp/db_search.htm).
- Alaska Consultants Incorporated (1983f). Background for Planning: City of Point Hope, Prepared for the North Slope Borough: 94.
- Arctic Slope Telephone Association Cooperative (2004). J. LeMay. Barrow.
- BLM (2005). Arctic Slope Corporation Entitlements. J. Kluwe. Anchorage, BLM: Spreadsheet of Village and Regional Corporation land entitlements within the North Slope Borough, indicated patented, interim conveyed, and remaining entitlements.
- DCED (2004). Alaska Community Database - Detailed Community Information, Alaska Department of Community and Economic Development: [www.dced.state.ak.us/commdb](http://www.dced.state.ak.us/commdb).
- Demientieff, L. (2004). ADEC Environmental Specialist. J. LeMay. Fairbanks: Telephone conversations regarding village solid waste programs.
- Fuller, A. S. and J. C. George (1997). Evaluation of Subsistence Harvest Data from the North Slope Borough 1993 Census for Eight North Slope Villages: for the Calendar Year 1992. Department of Wildlife Management, Barrow, AK. September.
- Grinage, K. (2004). North Slope Borough, Deputy Director of Capital Improvement Projects and Utilities. J. LeMay. Barrow, Alaska: Telephone conversations regarding facilities and utilities throughout the Borough.
- Piedlow, B. (2004). North Slope Borough, Public Works Department. J. LeMay. Barrow: Telephone conversations regarding village fuel storage.
- Shepro, C. E., D. C. Maas, et al. (2003). North Slope Borough 2003 Economic Profile and Census Report. Barrow, Alaska, North Slope Borough, Department of Planning and Community Services. IX.  
Contains regional overview for the borough and information about all eight villages on the North Slope.
- Sturmer, H. (2005). Fire Hydrants in North Slope Communities. J. Kluwe. Barrow: E-mail from North Slope Borough Deputy Fire Chief regarding number of fire hydrants in each community and associated water demands for firefighting.

University of Alaska - Arctic Environmental Information and Data Center (1978). North Slope Region Community Profiles, Prepared for the U.S. Department of the Interior.

24x36 folded publications with maps on one side and text on the other. Regional overview for the North Slope Borough, including information on population, economy, government, education, transportation, climate, environmental constraints to construction, regional topography and hydrology, permafrost, and subsistence. Separate publications for each village.

US Army Corps of Engineers (2000). Flood Hazard Data for Alaska Communities. 2004: [http://www.poa.usace.army.mil/en/cw/fld\\_haz/floodplain\\_index.htm](http://www.poa.usace.army.mil/en/cw/fld_haz/floodplain_index.htm).

Wickersham & Flavin Planning Consultants (1982). Comprehensive Plan, North Slope Borough. Anchorage, Alaska, North Slope Borough: 583.