

North Slope Borough

Point Lay Village Profile



Prepared for:
The North Slope Borough

Prepared by:
URS Corporation



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Abbreviations

ADEC	Alaska Department of Environmental Conservation
ANILCA	Alaska National Interest Lands Conservation Act
ASNA	Arctic Slope Native Association
ASRC	Arctic Slope Regional Corporation
BIA	Bureau of Indian Affairs
CB	citizen's band
CIP	Capital Improvement Program
DEW	Distant Early Warning
IRA	Indian Reorganization Act
IWC	International Whaling Commission
kW	kilowatt
NSB	North Slope Borough
SPCC	Spill Prevention Control and Countermeasure
TNHA	Tagiugmiullu Nunamiullu Housing Authority

North Slope Borough

Point Lay Village Profile

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4.7 Point Lay Village Profile

4.7.1 Summary

Early inhabitants of the Point Lay area hunted and fished along the Chukchi Sea coast and the local river systems. These small groups gradually congregated in the Point Lay area. In the late 1920s a trading post was established and a school building was constructed in 1930, as the population continued to grow. The original name of the community was Kali. The village was initially located on a barrier island and then on the banks of the Kokolik River before finally moving to its current location. Point Lay is now located on a low coastal bluff on the Chukchi Sea coast, approximately 150 miles southwest of Barrow. Kasegaluk Lagoon protects the community from the open ocean (Figure B-1).

Point Lay is not incorporated under state law as a municipality; it is the only unincorporated traditional community in the North Slope Borough (NSB). (Deadhorse is also unincorporated.) The Native Village of Point Lay is a federally recognized tribe. Cully Corporation is the local village corporation.

The military has had years of involvement in the Point Lay area. A Distant Early Warning (DEW) line site is located just southwest of the community. In 2005, a project for dismantlement and removal of the facilities was underway, as well as site restoration.

Point Lay's population declined from 1939 until the 1970s. Later census data show the community's population generally increasing through 2003. The community has a young population, with high ratios 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 NSB have been completed. An electric utility is functional in the community, as well as telecommunications. The NSB School District operates the Kali School, which serves kindergarten through twelfth grade students.

Sources: (University of Alaska - Arctic Environmental Information and Data Center 1978; Wickersham & Flavin Planning Consultants 1982; Alaska Consultants Incorporated 1983g;



Aerial view of Point Lay

Shepro, Maas et al. 2003; DCED 2004)

4.7.2 Physical Environment

- Point Lay is located on a low coastal bluff on the Chukchi Sea coast; Kasegaluk Lagoon protects the community from the open ocean (Alaska Consultants Incorporated 1983g). Point Lay's community boundaries encompass 30.5 sq. miles of land and 4.0 sq. miles of water (DCED 2004).
- The climate is arctic with temperatures ranging from –55 to 78 degrees Fahrenheit. Precipitation averages 6.9 inches annually, with 21 inches of snowfall (DCED 2004).
- The soils in the vicinity of Point Lay include frozen marine and alluvial clays, silt, sand, and gravel. Permafrost is estimated to be over 1,000 feet deep in the area (Alaska Consultants Incorporated 1983g).
- The physical characteristics of Point Lay are available in more detail in prior planning documents (Wickersham & Flavin Planning Consultants 1982; Alaska Consultants Incorporated 1983g).

4.7.2.1. 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.
- The flood of record for Point Lay is the coastal storm of October 1963, which caused a storm surge of 9 feet. Buildings in the new townsite are above the 100-year floodplain (US Army Corps of Engineers 2000).
- Offloading equipment, fuel, and supplies from barges is becoming a hazardous task as ocean characteristics change. Fuel handling and the ability to respond to a large fuel spill have been of particular concern to the community.
- Human-caused environmental hazards include potentially contaminated sites. Alaska Department of Environmental Conservation (ADEC) has five sites in Point Lay listed in their contaminated sites database (Table 4.7-1) (ADEC 2004).

**Table 4.7-1
Potentially Contaminated Sites in Point Lay**

Site Name	Location	Status	Reckey
Dewline Site / LIZ-2 Garage (SS006)	Kasegaluk Lagoon, Point Lay, AK 99759	Active	198931X902509
Point Lay Cully School Site	Unk, Point Lay, AK 99759	Inactive	1992310921301
Point Lay Dewline LIZ-2 Landfill	South of Hangar Building, Point Lay, AK 99759	Active	198931X902512
Point Lay Landfill	No Address, Point Lay, AK 99759	Inactive	1991310909101
Point Lay Tank Farm	Point Lay, Point Lay, AK 99759	Inactive	1992310907703

Source: (ADEC 2004)

4.7.3 *Human Environment*

- Point Lay is not incorporated under state law as a municipality; it is the only unincorporated traditional community in the NSB. The Native Village of Point Lay is a federally recognized tribe (DCED 2004).
- Early inhabitants of the Point Lay area hunted and fished along the Chukchi Sea coast and the local river systems. These small groups gradually congregated in the Point Lay area. In the late 1920s a trading post was established and a school building was constructed in 1930, as the population continued to grow (University of Alaska - Arctic Environmental Information and Data Center 1978; Alaska Consultants Incorporated 1983g; DCED 2004).
- Mail service, military installations, and reindeer herding strongly influenced the history of Point Lay (Alaska Consultants Incorporated 1983g).
- The community has relocated several times, adopting its present location near the DEW Line station in 1981 (Alaska Consultants Incorporated 1983g; DCED 2004).
- Cully Corporation is the local Alaska Native Claims Settlement Act (ANCSA) village corporation.

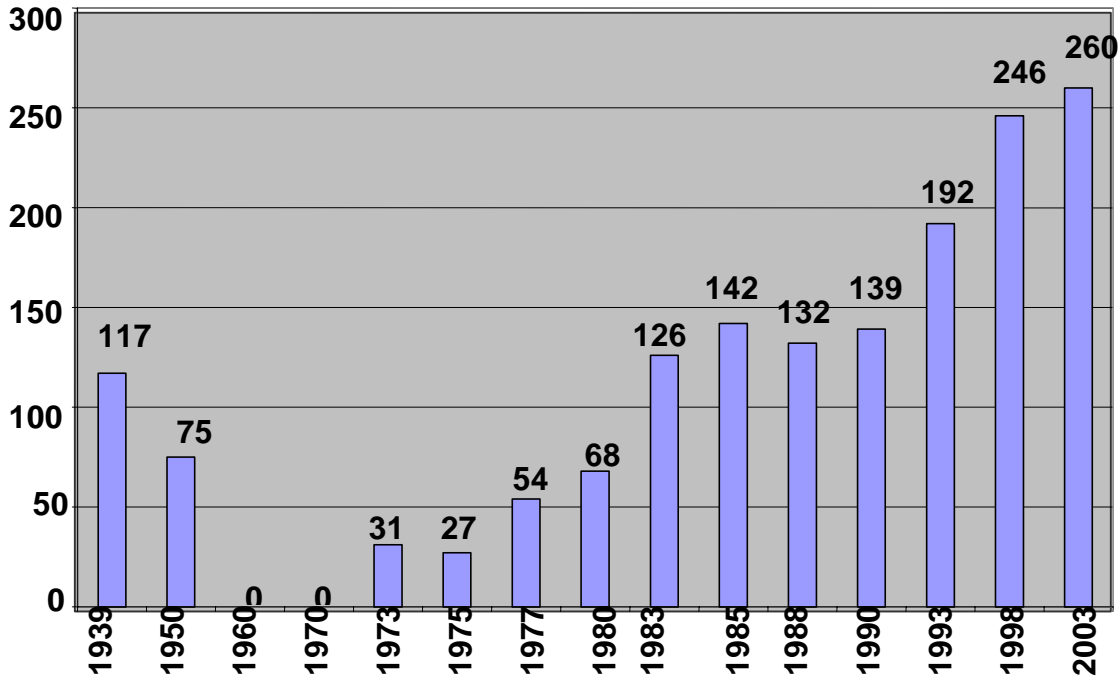


Homes in Point Lay

4.7.3.1. Population

- Point Lay's population declined from 1939 until the 1970s. The community was abandoned in approximately 1960 and was re-established in 1973. Later census data show the community's population generally increasing from 1973 through 2003 (Shepro, Maas et al. 2003). Refer to Figure 4.7-1.
- The population in Point Lay is very young; the proportion of the population under 4 years of age has increased 22 percent since 1998. The average age in the community (24.1) is less than in the state or nation (Shepro, Maas et al. 2003). Refer to Table 4.7-2.
- While the population in Point Lay is predominantly Inupiat (86.2 percent), the percentage of non-Inupiat residents has increased in recent years to 13.8 percent (Shepro, Maas et al. 2003).

**Figure 4.7-1
Point Lay Population from 1939 to 2003**



Source: (Shepro, Maas et al. 2003)

**Table 4.7-2
Comparison of Age Cohorts in Point Lay Alaska, and the United States***

Age Groupings	Point Lay	Alaska	U.S
% 17 Years & Under	48.90%	30.40%	25.70%
% 65 Years & Older	2.2%	5.70%	12.40%

Note: *Results include only those individuals participating in the census survey.

Source: (Shepro, Maas et al. 2003)

4.7.3.2. Economy

- The NSB and the NSB School District are the primary employers in the community, providing approximately 62 percent of local employment. The Village Corporation provides another 11 percent of local employment (Shepro, Maas et al. 2003).
- The unemployment rate in Point Lay was estimated at approximately 16 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 4.7-3.
- Underemployment in the community has improved from 39 percent of the labor force in 1998 to approximately 17 percent in 2003 (Shepro, Maas et al. 2003).

**Table 4.7-3
Pt. Lay Employment Status, 1998 and 2003**

Type of Employment	Number	%	Number	%
Permanent full-time	50	52.60%	53	54.10%
Temporary/Seasonal	20	21.10%	21	21.40%
Part-Time	9	9.50%	8	8.20%
Unemployed	16	16.80%	16	16.30%
Total	95	100.00%	98	100.00%

Note: *Results include only those individuals in the labor force who participated in the census survey.

Source: (Shepro, Maas et al. 2003)

4.7.3.3. Subsistence

- Point Lay subsistence users “have access to a wide variety of resources including: marine, riverine, and terrestrial resources. The village harvest is dominated by a summer beluga whale harvest.” (Fuller and George 1997)
- Approximately 77 percent of the households in Point Lay participate in the local subsistence economy (Shepro, Maas et al. 2003). Of those households, 75 percent are heavily reliant on subsistence resources, where half or more of household diets consisted of local resources. Refer to Table 4.7-4. The subsistence lifestyle remains a primary cultural choice for Native households.
- Employment status does not appear to substantially affect Point Lay residents’ level of reliance upon subsistence resources. Nearly 71 percent of households with full-time employment were classified as heavily reliant on subsistence resources, while 85 percent of households with less than full-time employment were classified as heavily reliant (Shepro, Maas et al. 2003). As the economies have declined in the rural communities in recent years, the reliance on subsistence resources has increased.
- The sharing patterns for subsistence resources appears to have shifted between the 1998 census and the 2003 census (Shepro, Maas et al. 2003). There was a large increase in sharing within the community as well as an increase in sharing with other North Slope and Northwest Arctic Borough communities. However, there were decreases in sharing with residents of other communities, such as Anchorage and Fairbanks. Refer to Table 4.7-5.



Skiffs ready to launch in Point Lay

- Thirty percent of the Point Lay households spent less than \$500 on subsistence activities. Approximately 40 percent of the households spent \$3,100 to \$9,500 on subsistence activities (Shepro, Maas et al. 2003).
- Subsistence activities occur year-round, with seasonal emphases. Caribou, ptarmigan, and seals are available year-round. Polar bears and other fur-bearing animals are typically hunted in the winter months, while whaling, duck hunting, walrus hunting, and fishing typically occur in the summer months (University of Alaska - Arctic Environmental Information and Data Center 1978). Due to the community's location on Kasegaluk Lagoon's shallow protected waters, the community's whaling focuses on belugas; the beluga harvest averages approximately 40 whales per year (Fuller and George 1997). There is interest in re-establishing a bowhead hunt for the community. Some hunters from Point Lay travel to Barrow, Wainwright, or Point Hope to participate in spring hunting of bowhead whales.
- Subsistence Harvests – Data from the Alaska Department of Fish and Game (Alaska Department of Fish and Game 2004b) indicate that Point Lay residents primarily utilize marine mammals, caribou, birds, and fish, in terms of pounds per person harvested. Other resources are also utilized by the community, but had lower harvest levels in terms of pounds per person. Refer to Table 4.7-6.
- 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 the seasonal and annual variations of the resources.

Table 4.7-4
Pt. Lay: Subsistence from Local Sources*

Amount	1998		2003	
	Number	Percent	Number	Percent
None	2	4.50%	2	4.50%
Very Little	4	9.10%	7	15.90%
Less Than Half	5	11.40%	2	4.50%
Half	9	20.50%	11	25.00%
More Than Half	14	31.80%	6	13.60%
Nearly All	4	9.10%	8	18.20%
All	6	13.60%	8	18.20%
Total	44	100.00%	44	100.00%

Note: *Results include only households participating in the census survey and responding to the question "How much of the meat, fish and birds you and your household ate came from local food sources (fishing and hunting)?"

Source: (Shepro, Maas et al. 2003)

**Table 4.7-5
Pt. Lay: Communities Where Subsistence Foods Are Shared***

	1998		2003	
	Number	%	Number	%**
Own Community	14	21.9%	24	64.9%
Another NSB Community	18	28.1%	14	37.8%
Any NANA Community	10	15.6%	10	27.0%
Anchorage	16	25.0%	8	21.6%
Fairbanks	4	6.3%	1	2.7%
Other	2	3.1%	3	8.1%

Note: *Results include only those households participating in the census survey.
 **Percentages are of the total number of households indicating they shared subsistence resources with other households.

Source: (Shepro, Maas et al. 2003)

**Table 4.7-6
Point Lay Subsistence Harvest Summary, ADF&G 1987**

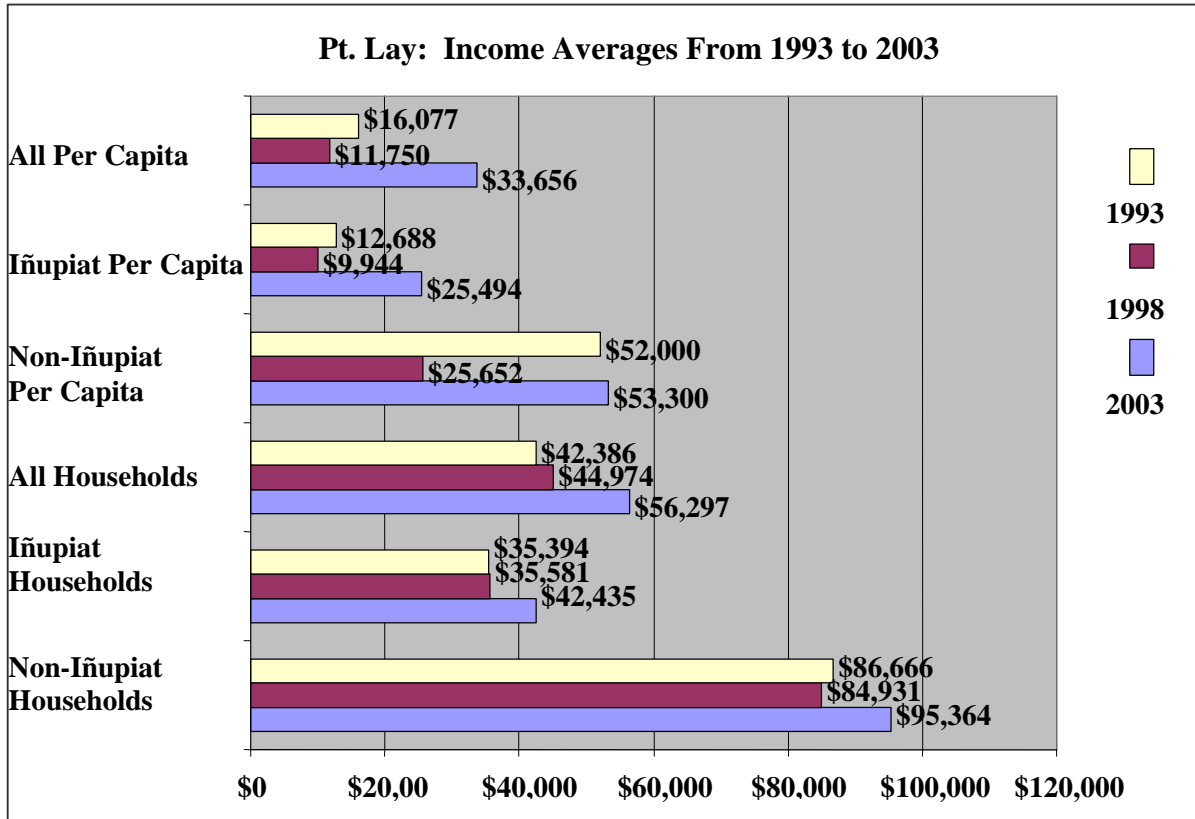
Resources	Estimated number	Estimated pounds	Average Pounds	Per Capita Pounds
All Resources		107,321.00	2495.83	890.11
Fish	2,807	2,983.00	69.38	24.74
Salmon	147	425.00	9.88	3.52
Non-Salmon Fish	2,660	2,559.00	59.50	21.22
Land Mammals	458	21,426.00	498.27	177.71
Large Land Mammals	167	21,309.00	495.56	176.74
Small Land Mammals	292	117.00	2.72	0.97
Marine Mammals		76,853.00	1787.27	637.41
Birds and Eggs	3,531	5,836.00	135.73	48.40
Vegetation		223.00	5.19	1.85

Source: (Alaska Department of Fish and Game 2004b)

4.7.3.4. Income

- The average household income for Point Lay was calculated to be \$56,297 (Shepro, Maas et al. 2003). However, the average household income for Inupiat residents was lower, at \$42,435. The per capita income figures varied similarly. Average incomes in the community rose by approximately 20 percent, while the average Inupiat household income rose by approximately 16 percent. Refer to Figure 4.7-2 and Table 4.7-7.
- 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 4.7-8.
- The 2003 census (Shepro, Maas et al. 2003) reported that seven Point Lay households (all Inupiat) are below the poverty threshold.
- Approximately 20 percent of Point Lay households receive income from craft sales; the average reported income from craft sales over a three year period is \$1,104, or an average of \$368 per year (Shepro, Maas et al. 2003).

**Figure 4.7-2
Income Averages in Point Lay, 1993 to 2003**



Source: (Shepro, Maas et al. 2003)

**Table 4.7-7
Pt. Lay: Mean and Median Household Incomes, 2003***

	All	Iñupiat
Mean	\$56,297	\$42,435
Median	\$49,000	\$36,000

Note: *Results include only those households providing income data.

Source: (Shepro, Maas et al. 2003)

**Table 4.7-8
Average Percent Income Change in Point Lay, 1998 through 2003***

	1993-1998	1998-2003
Average HH Income	5.80%	20.10%
Average Per Capita Income	-26.90%	65.10%
Average Iñupiat HH Income	0.50%	15.70%
Average Iñupiat Per Capita Income	-27.60%	61.00%
Average Non-Iñupiat HH Income	-2.00%	11.50%
Average Non-Iñupiat Per Capita Income	-50.70%	50.10%

Note: *Results include only those individuals and households responding to the survey

Source: (Shepro, Maas et al. 2003)

4.7.3.5. Housing

- The 2003 census (Shepro, Maas et al. 2003) estimated that 63 percent of the households in Point Lay live in single-family dwellings, with the remaining 37 percent of households living in trailers or multi-unit structures (Table 4.7-9). The community had 67 housing units with 61 occupied, and 6 vacant (DCED 2004).
- Diesel oil is the primary heat source for approximately 97 percent of occupied households. Stand-alone stoves or heaters serving the majority of Point Lay households (67 percent). Baseboard/boiler systems serve another 23 percent of occupied homes (Shepro, Maas et al. 2003). Refer to Table 4.7-10.



Homes in Point Lay

**Table 4.7-9
Comparison of Housing Unit Types in Point Lay***

Type of Household	1998		2003	
	Number	Percent	Number	Percent
Mobile Home/Trailer	2	3.9%	12	20.0%
One-family house	44	86.3%	38	63.3%
Building for two families	0	0.0%	4	6.7%
Building for 3 Or 4 families	1	1.9%	4	6.7%
Building for 5 or More Families	4	7.9%	1	0.0%
Other	0	0.0%	2	3.3%
Total	51	100.0%	61	100.0%

Note: *Results include only those households participating in the census survey.

Source: (Shepro, Maas et al. 2003)

**Table 4.7-10
Main Home Heating Systems in Point Lay, 1999 and 2003***

Type of System	1999		2003	
	No.	Percent	No.	Percent
Stand-Alone Stove	0	0.00%	30	52.60%
Stand-Alone Heater	39	73.50%	8	14.00%
Forced-Air Furnace	2	3.80%	4	7.00%
Baseboard/ Boiler System	12	22.70%	13	22.80%
Other	0	0.00%	2	3.60%
Total	53	100.00%	57	100.00%

Note: *Results include only households participating in census survey.

Source: (Shepro, Maas et al. 2003)

4.7.4 Land Ownership and Land Use

4.7.4.1. Land Ownership

- The Cully Corporation selected lands throughout the Point Lay area. However, the corporation may not re-convey land to the community because it remains unincorporated. In this situation, the State Municipal Lands Trustee may hold these lands in trust for the community. Some parcels have been quitclaimed to the NSB for capital improvement projects (Alaska Consultants Incorporated 1983g).
- Cully Corporation has the right to select 69,120 acres of federal land in the Point Lay area. Land status records indicate that 57,167 acres have been patented to the corporation; interim conveyances are pending for 175 acres (BLM 2005). The corporation is also entitled to 20,889 acres of land to be reallocated from Arctic Slope Regional Corporation (ASRC); to date, 17,349 acres have been patented to the corporation (Alaska Consultants Incorporated 1983g; BLM 2005). Land conveyances are still incomplete.
- ASRC owns the subsurface rights to the Cully Corporation lands, as well as additional lands in the area.
- Two Native allotment applications were made for lands on the spit, just north of the old village site, on land used by the Air Force.
- In Point Lay, as in other North Slope villages, accurate information regarding the status of title for individual lots is not always available (Alaska Consultants Incorporated 1983g). This can cause problems in land conveyances.



View from Point Lay

4.7.4.2. Land Use

- Point Lay is zoned a Village District in the NSB 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-15). 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 are generally on the north and west sides of the community, with proposed expansion to the north.
- **Public and Semi-public** – Public and semi-public buildings and facilities are generally located in the center of the community, in the vicinity of the school. These buildings and facilities include the fire station, government buildings, health clinic, police station, community center, and school.
- **Commercial** – Office buildings, stores, and other businesses are generally located in the south central section of town, also in the vicinity of the school.
- **Industrial** – Industrial land uses typically occur on the southeast side of town. Industrial land uses include the airport, fuel storage tanks, landfill, power plant, telecommunications facilities, and wastewater treatment facilities.

4.7.5 *Community Facilities and Utilities*

4.7.5.1. 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 community center, police station, and fire station equipped with fire engines and an ambulance.
- The fire department is equipped with a pumper apparatus and a pumper/water tender apparatus, capable of pumping 1,250 gallons per minute (gpm) and 750 gpm of water respectively, for a total of 2,000 gallons of water per minute (Steurmer 2005).
- Critical facilities and infrastructure in Point Lay are indicated in Figure V-21.



Point Lay Fire Station

4.7.5.2. Water

- A piped water system was constructed in 2000. The system is operational, with 1,750,000 gallons of piped water and 81,000 gallons of truck hauled water in 2003 (Grinage 2004).
- The NSB Public Works Department (PWD) provides the operations and maintenance for both the piped and haul water systems. (Grinage 2004).
- Water is derived from a surface water source, a nearby lake, filtered and stored in a tank. Approximately 60 percent of the residents have piped water and 40 percent have water delivered from a central watering point and stored in household tanks.
- The typical household water holding tank capacity is 250 gallons (Grinage 2004).
- The frequency of delivery is four to eight days (Grinage 2004).
- Water is treated with micro and nano filtration.
- There are 12 fire hydrants in the community. Hydrants are spaced greater than 500 feet apart, which exceeds the 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 gallons per minute. In structures that have a sprinkler system, such as the school, the sprinkler system would demand a flow of 1,000 gallons per minute and the hydrant flow demand would be an additional 1,000 gallons per minute (Steurmer 2005).

4.7.5.3. Sewer

- The sewer system installation project was constructed in 2000. The project has been completed, but there are ongoing issues of breaks in the line. In 2003, approximately 60 percent of households had flush toilets hooked to a sewer line while those that depended on the water truck have a holding tank.
- The PWD provides the operations and maintenance for both the piped and haul sewer systems (Grinage 2004).
- Information obtained from the Wastewater Discharge Permit dated January 2002 indicates the wastewater treatment plant discharges treated wastewater onto a small bluff overlooking Kasegaluk Lagoon via a 3-inch outfall line.

4.7.5.4. Solid Waste

- The old landfill is located approximately one mile from the end of the airport runway and was permitted in 1986. The closure plan was approved in 2000.
- NSB maintains a new Class III solid waste landfill that was constructed in 2000. Refuse is collected by and disposed of at the Borough operated landfill. The Class III landfill has a current permit, and typical contributions are unspecified. This landfill is anticipated to have a design life of 20 years and a total capacity of 17,580 cubic yards. The components of the new facility include a salvage area, burn box, sewage area, and drum storage area (Demientieff 2004).

4.7.5.5. Power

- The majority of households use diesel oil or a combination of diesel and electricity to heat their homes (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 power plant is expected to be upgraded in 2006; the project has been funded on the Borough capital improvement project program.
- The rate schedule for use between one and 600 kW was 15 cents per kW hour; use over 600 kW was 35 cents per kW hour (Grinage 2004).
- The community has a 2,400/4,160 Volt Distribution System with a 1,980 kW generation capacity. The system generated 3,164,000 kW hours in fiscal year 2004 (Grinage 2004).
- Point Lay residents receive a power cost equalization subsidy (Grinage 2004).

4.7.5.6. Fuel Oil/Petroleum Products

- The NSB PWD provides the operations and maintenance.
- 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 Countermeasure (SPCC) plans (Piedlow 2004). Refer to Table 4.7-11.



Kali School

**Table 4.7-11
Point Lay Fuel Tanks**

Tank Location	Tank Description or Number	Year Installed	Type of Fuel	Tank Capacity (gallons)
COMMERCIAL				
Tank Farm & Gas Station	PLZ-32	1995	Diesel	250,000
	PLZ-38	1995	Diesel	250,000
	PLZ-6	Upgraded 1995	Diesel	125,000
	PLZ-7	Upgraded 1995	Diesel	125,000
	PLZ-33	1995	Gasoline	30,000
	PLZ-30	1995	Diesel	10,000
	PLZ-34	1995	Diesel	4,000
	PLZ-35	1995	Gasoline	4,000
Teleconference Center	Tank # 1	1998	Diesel	250
Search & Rescue	Tank # 1	1998	Diesel	500
Water Treatment Plant	Tank # 1	2000	Diesel	2000
Sewage Treatment Bldg	Tank # 1	2000	Diesel	2,000
Point Lay School	Tank # 1	1993	Diesel	10,000
	Tank #2	1993	Diesel	2000
	Tank #3 (Utility Bldg)	1987	Diesel	500
Health Clinic	Tank #1	1983	Diesel	7,000
	Tank #2	1983	Diesel	250
Fire Station	Tank #1	1981	Diesel	7,200
	Tank #2	1981	Diesel	275
Warm Storage Building	Tank #1	1988	Diesel	600
	Tank #2	1988	Diesel	300
Old Water Treatment Building	Tank # 1	1983	Diesel	881
	Tank # 2	1983	Diesel	264
Generator Building	Tank #1	1980	Diesel	10,000
	Tank #2 (Day tank)	1980	Diesel	300
	Tank #3	1980	Oil	250
USDW/Maintenance Bldg	Tank #1	1987	Diesel	6,000
	Tank #2	1987	Diesel	6000
CIP Camp	Tank #1	1975	Diesel	5000
Public Safety Office Bldg	Tank # 1	2000	Diesel	250
RESIDENTIAL				
Single-Family Residence (Blk 10, Lot 10)	Tank # 1	1998	Diesel	250
Single-Family Residence (Blk 10, Lot 9)	Tank # 1	1998	Diesel	250
Single-Family Residence (Blk 8, Lot 9)	Tank # 1	1990	Diesel	250
Single-Family Residence (Blk 8, Lot 8)	Tank # 1	1980	Diesel	250
Low Rise Multiple Family Residence (Blk 8, Lot 12)	Tank # 1	2000	Diesel	300
Single-Family Residence (Blk 9, Lot 9)	Tank # 1	1978	Diesel	250
Single-Family Residence (Blk 9, Lot 10)	Tank # 1	1978	Diesel	250
Single-Family Residence (Blk 8, Lot 3)	Tank # 1	1980	Diesel	250
Single-Family Residence (Blk 5, Lot 6A)	Tank # 1	1998	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)

4.7.6 *Communication Infrastructure*

The telecommunications facilities serving Point Lay include a fully digital local exchange telephone service, local dial-up Internet, widely-used citizens 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 presents 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).

4.7.7 *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).

4.7.8 *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 meeting 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

- While some community expansion areas have been identified between the existing development and the airport, the lack of roads and utility connections to lots limits new housing construction. In addition, the vacation and relocation of the existing airport road would facilitate development of new residential areas. Contamination from fuel and glycol spills was mentioned as a factor for use of these lands and are discussed in more detail under hazards.
- As Air Force lands are cleaned up and become surplus, there was some discussion about availability of those lands for selection by Cully Corporation or the Native Village of Point Lay.
- When Alaska National Interest Lands Conservation Act (ANILCA) passed, we lost 25 percent of our original boundaries. We have coal in that lost land; Nuiqsut had oil. We need subsurface rights.

Land Use

- Discussions regarding fuel/glycol spills, houses and utilities sinking (subsidence), permafrost melting, and erosion in the vicinity of the fresh water supply have land use implications.

Fish and Wildlife/Subsistence

- Point Lay is trying to get bowhead subsistence whaling going again. International Whaling Commission (IWC) require a needs study. The Borough Mayor was going to get funds.
- Subsistence use areas were documented in 1987; it was done by a few of the elders. There is a map produced by this study at the power plant.
- Many subsistence resources are changing with climate change. Permafrost melting is increasing. Birds are migrating at different times. The fish are changing – we are going farther from the village to fish. There was a polar bear in Point Lay in June.
- We need a Beluga conservation plan. We were working with Robert Suydam in the Borough wildlife department, but progress appears to have stalled.

Hazards

- River erosion is threatening the current community freshwater source. There is a need to repair the water source via a dredging project coupled with armoring against erosion. It would also improve access. Alternate sources for water are on the landfill road, so water quality is questionable.
- Fuel and glycol spills are migrating towards the water storage. The spills could degrade the styrofoam insulation underneath. Drilling associated with new construction by the power plant is discovering glycol in the ground water. Houses and utilities sinking (subsidence) and permafrost melting were listed as major concerns and sources of maintenance costs. It was mentioned that sewer/ water pipes were being damaged.

Socioeconomic Factors

- Families are moving out because there are no jobs and no housing.
- The old school is divided into seven apartments for low-income housing. They can't afford houses; we need more low-income homes.
- Multiple generations share a single home; people are living in dangerous and overcrowded situations.
- More apartments are needed.
- Tagiugmiullu Nunamiullu Housing Authority (TNHA) is the housing authority for Point Lay. It may be possible to get some funding for homes from Bureau of Indian Affairs (BIA). The tribe has given some of its powers to the Arctic Slope Native Association (ASNA) and the Inupiat Community of the Arctic Slope (ICAS); the current funding share for Point Lay is enough to build half of a house.
- Plumbing and wiring updates are needed in many homes.
- There are not enough lots available for new construction.
- There is a real interest in developing the coal resources and creating coal related jobs.
- We need more local hire for teachers.
- The school is going to need more classrooms as the population increases.

- We need opportunities for technical training to supply the community with a skilled labor force and provide alternatives for kids who do not go to college. All skills are needed in the community.
- There need to be more health aides in the community.
- Cully Corporation needs to be more active and have more local hire; the corporation does not have an office with local staff in the community. Approximately 70% of Cully Corporation shareholders live outside of Point Lay.

Public Services, Facilities, and Government

- The NSB built this village. The corporation is not here and is not involved in this village. The corporation and village IRA council need to be here and work together with the NSB.
- There are inadequate facilities at the airport; there is a need for an airport terminal facility with restrooms.
- In 2004, the washeteria was closed; it was a big issue for the community. It's a false argument that people can have washers and dryers in their homes because there are no hookups and there is often no space for them. There was a resolution for the Cully Corporation to operate the washeteria. In 2005, the facility had re-opened and was operated by the corporation.
- The community needs a new/bigger post office.
- If bypass mail goes by truck to Deadhorse, it will raise prices for shipping and travel, especially as flights decrease. Without subsidies, it's going to be too expensive to go anywhere.
- The store needs to be enlarged, but it is not in very good financial standing. There needs to be more fresh food and better storage for food; some food is spoiled due to current storage methods.
- The community needs a day care facility.
- A grant writer is needed to obtain funds for community projects.
- Stockpiled gravel is limited/reserved for the airport; it is not available for other projects. The Borough dredge was shipped out early before more gravel could be stockpiled for community purposes. The community needs access to gravel.
- Tank farms need to be sited farther from the community.
- Approximately 70 percent of homes are connected to water/sewer, but some are failing due to subsidence. We have a gravity flow system, which is buried very deeply. The lines are shearing off with subsidence in some locations. Lines being sheared were causing up to 40 percent loss of water.
- There are not likely to be future water and sewer project expansions because the construction equipment was shipped out.
- There have been serious leaks in the water system; the north end of town is not well protected for fire purposes, due to the damage in the water system.
- Repairs to roads are not being done properly; there is not enough insulation around water and sewer lines, and the ground is not freezing back properly.

- We have a white elephant water and sewer system. We need an enhanced truck haul system. We still have two systems operating in the community, creating operational inefficiencies.
- Coal is a cheap power and residential heating source. The early program by ASRC to bring coal into the community for residential heating was a success and people saved a lot of money on their fuel bills, but it has been stopped. Some people are now taking the special coal burning stoves out of their houses because they are not being used and they take up too much space.
- The transition from Borough utilities to co-op process is being pushed, but it will result in higher power costs.
- Costs for power are going up. The Borough presently runs the system. There is concern about the village voice in the co-op. There is also concern over responsibility for maintenance costs and the ability of Pt. Lay to compete against other communities in the co-op for grants. As of 2004, Pt. Lay had not signed on to the co-op arrangement.
- We need better heating systems for new homes. The current systems won't work during power outages. Toyo stoves are not adequate; they are intended to be *secondary* sources of heat. Under high winds, stovepipes will back up and back fire. We need boiler systems for heat and hot water. (See comments on coal heating.)
- We want to utilize waste heat from the power plant.
- The heat in Borough facilities could be better regulated, saving fuel.
- Why aren't we looking at alternative energy sources (wind, solar)?
- There are ongoing problem as an unincorporated community to enforce laws and ordinances. We are looking for mechanisms to enforce laws and regulations. The village could use updated information on incorporation pros and cons and responsibilities.
- When is title 19 going to be revised? It's too weak to enforce related to oil companies' activities.

Petroleum and Mineral Development

- We need data to prove cumulative effects. Could a cumulative effects fund be developed – similar to the compensation fund – to spread out the burden across all of the projects?
- See comments related to development of coal resources and Title 19 revision.

4.7.9 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.

- **Heavy Equipment** – Additional equipment is needed like a bigger backhoe and rock saw. Current water/sewer is not working and they don't have the equipment to correct the water/sewer line.

- **Fuel Handling** – A fuel handling dock facility is needed for unloading fuel. At present time, it is very hazardous how they unload and reload the fuel to the fuel storage facility. If there were a disaster, it would be very dangerous for the way they are handling the fuel. We wouldn't be able to handle a break on the line to the fuel storage.
- **Snow Fence** – When the project is complete, it will be off of the easement by about 10 feet.
- **Water/sewer Expansion** – We do not have a rock saw and a bigger backhoe to work on the current breakage in the water/sewer line. We have had many freeze ups in the community to date and the system is down.
- **Sewage** – Public Works have been building and locating honey bucket boxes in the community due to the problems with the sewer system. It takes the staff a while to collect them and the current system could become a health hazard.
- **Sewage** – There has been some confusion over the ownership of particular septic tanks in the community.
- **Asbestos Removal and Employment** – There was a project in Point Lay but the community was not included on the project. Point Hope got the contract and did not hire anyone from the local community. Several people in Point Lay are certified, but were not informed of refresher training to keep certifications current. Training is difficult because it is usually not offered locally.

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

- Shelter and trail markers
- Roadway erosion
- Water and sewer system extensions
- Airport expansion
- Snow Removal Equipment Building and warm storage
- Warm storage for sewer equipment
- Power plant upgrade
- Fuel tank construction
- Repair/construct fuel pipelines
- Relocation of fuel storage tanks
- Fuel handling dock facility
- Health clinic upgrade

4.7.10 References

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