

Kotlik Community Development Plan



2010

Vision:

Protect Subsistence, the Environment and our Culture while improving our livelihood

Acknowledgements

The Kotlik Tribal Council (KTC) would like to thank the following entities and individuals for their contributions to the Kotlik Community Development Plan.

U.S. Housing and Urban Development for providing the primary funding for this Plan.

Yukon Delta Fisheries Development Association for providing supplemental funding.

Northern Management for providing technical support and assistance.

Bizware Online Applications for developing the online planning platform.

Alaska Native Tribal Health Consortium for supplying information from the Kotlik Sanitation Facilities Feasibility Study, December 2003.

Association of Village Council Presidents for supplying information from the Comprehensive Economic Development Strategy.

State of Alaska Community Photo Library, Robert Okitkun, Rita Okitkun and Rosella Hem for photographs.

U.S. Army Corps of Engineers, Alaska District for supplying information from their website.

KTC would like to acknowledge Robert Okitkun for spearheading this planning effort and all the residents of Kotlik for participating in the process and providing their valuable input.

Table of Contents

Introduction	1
Values	2
Community Profile	3
History	3
Location	3
Demographics	4
Governance	5
Critical Needs	7
Goals & Priorities for the Future of Kotlik	8
Culture & Tradition	9
Housing	10
Transportation	11
Economy	12
Public Facilities & Utilities	15
Wellness & Safety	17
Environment	18
The Land	19
Implementation	20
Appendices	21
Community Maps	22
Community Facilities Inventory & Analysis	24
Housing Inventory & Analysis	32
Fisheries Infrastructure Inventory & Analysis	33
Available Lands & Suitability Analysis	34
2010 Approval	40
Contacts	41

Introduction

Completed in 2006, the Kotlik Community Development Plan was developed to aide local leaders that proper planning begins to ensure that coordinated and progressive growth occurs for the benefit of the residents. While growth is inevitable, local concerns about Yup'ik culture, subsistence, environment, fish & wildlife, morals and beliefs are important for the well being of the residents.

The time tested beliefs of honoring elders and respecting the young and being good stewards to the environment must be passed on to the generations yet to come. We believe that our ancient Yup'ik teachings are the basis for successful, healthy living in any environment. While not all teachings are perfect, the basic guides to good humanity in the Yup'ik culture should compliment people of the world.

Utilization of Bizware Online Application's "Docmeister" online document editor enabled the planning team to create the document online while other team members were able to view changes as they were being made. This synergistic planning allowed creation of the document faster and more thoroughly. Utilization of an online planning system enables the Tribe's staff to ensure that the community plan is timely and relevant.

In 2009, the Kotlik Tribal Council began participating in the Rural Alaska Community Action Program's (RurAL CAP) Village Planning and Development Initiative. Funded by the U.S. Department of Agriculture Rural Development, this initiative was designed to support ten villages in the development and implementation of local community plans. During the summer of 2009, RurAL CAP's Rural Planning Coordinator, Charlene Stern, and Denali Commission intern, Jacqueline Yeagle, facilitated a public meeting in Kotlik to update the Kotlik Community Development Plan.

Values

As a Yup'ik community, the things most valued are culture and tradition that teach respect for land, nature and other people. With guidance and support from our elders, we must pass on knowledge of:



Community Profile

History

Early contact with the Yup'ik people of the region occurred with the Russian military. The Russians attempts at coercion failed when they awoke one morning to find that the Yup'ik people had disappeared into the surrounding environment. It was only with the introduction of Russian Orthodox priests that trading with the Russians resumed. Intermarriage between Russian men and Yup'ik women produced many children that because of their fluency in both languages became the primary traders.

By the time Alaska was purchased in 1867, the Russian Orthodox had an established church and cemetery in Kotlik. The village was first recorded by the U.S. Census in 1880. A fur farm (either fox or mink) was established in Kotlik in the late 1800s-early 1900s.

The only store on the North Mouth of the Yukon Kuskokwim was located in the nearby community of Hamilton. Hamilton (also known as Fort Hamilton or Old Hamilton) was first reported by L.A. Zagoskin of the Russian Navy in 1844. The village was named after Charles H. Hamilton. In 1897, the North American Transportation and Trading Company established a supply post and riverboat landing. In exchange for furs and salmon, the store offered credit for goods.

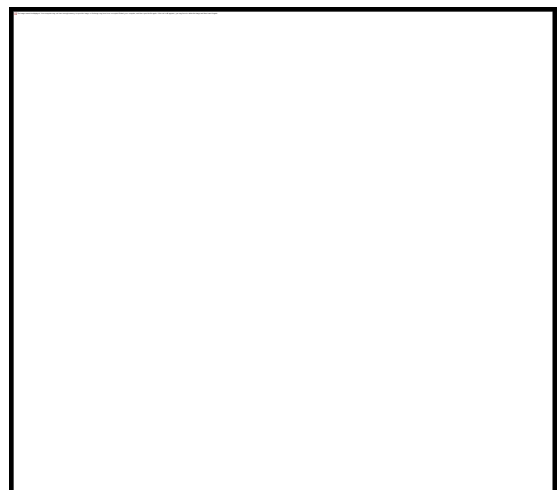
During this time period, the neighboring communities of Bill Moore Slough and Pastolik were occupied by a couple of families whereas Chaneliak had about 100 residents. A Catholic church and a one room school were constructed in Chaneliak. The Bureau of Indian Affairs (BIA) enticed families to move to Chaneliak by offering food, clothing, health and educational support.

In the early 1950s, an intense fall flood damaged a trading post and several homes in Chaneliak. The incident created enough concern that the BIA built a new school 5 miles up the Yukon River at Kotlik. The school drew in residents from the nearby villages of Channiliut, Hamilton, Bill Moore's Slough, and Pastolaik. Kotlik has since become one of the larger ports and commercial centers of the lower Yukon River.

Location

The Yukon-Kuskowkim Delta fan has three main tributaries: south mouth, middle mouth and north mouth. Kotlik is located on the north mouth, approximately 165 air miles northwest of Bethel. It lies at approximately 63.034170 North Latitude and -163.55330 West Longitude (Sec. 25, T028S, R026W, Kateel River Meridian).

Kotlik is within the Bethel Recording District. The area encompasses 3.8 square miles of land and 0.8



square miles of water. The climate is subarctic. Temperatures range between -50 and 87 degrees. The average snowfall is 60 inches, with 16 inches of precipitation annually. High winds and poor visibility are common during fall and winter.

Kotlik is located in marshy lowlands. The village is prone to flooding particularly in the autumn when storms produce extreme tides. Spring flooding is less common in Kotlik because of its position on the edge of the Delta.

Demographics

In 2008, the Alaska Department of Commerce, Community and Economic Development estimated Kotlik's population at 601. The community has experienced an average growth rate of 3%. The most current *detailed* population information available is from the 2000 Census.

Kotlik is located in the Wade Hampton Census Area. According to the 2000 Census, Wade Hampton's per capita income was \$8,717 making it one of the poorest places in the United States.

Many Kotlik residents derived the majority of their income from commercial fishing for herring in the Norton Sound and salmon in the Yukon River. The residents that hold commercial fishing permits often employ one or two helpers. Some residents also work at salmon processing plants in Emmonak, St Mary's, Marshall or Anchorage. A few younger residents participate in the "High Seas" fishery with the Yukon Delta Fisheries Development Association's (YDFDA) Community Development Quota partners. In 2003, a subsidiary of YDFDA, Kwikpak Inc., started a "buy and fly" salmon operation.

Additional sources of income include trapping and the sale of arts and crafts. Trapping of mink, otter, beaver, muskrat, fox, lynx, wolverine and wolf has dropped in recent years due to low fur prices. Sales of traditional arts and crafts continue however the market is not stable.

Local employers include the Kotlik School, Kotlik City and Utilities offices, two stores, Tank Farm, Village Corporation office, Clinic, Headstart, three tribal councils, and post office.

A community survey was completed in 2006 to inventory the human resources and training needs of Kotlik. Results showed a majority of the residents have completed high school and many have taken college courses.



Governance

There are three federally recognized tribes located in Kotlik: Kotlik Tribal Council, Native Village of Bill Moore's Slough and Native Village of Hamilton.

Kotlik Tribal Council

With an enrolled membership of 637, Kotlik Tribal Council (KTC) is the largest of the three tribal governments. KTC operates many programs and services including: Enrollment, Native American Housing and Self Determination Act, Indian General Assistance Program, Indian Child Welfare Act, Temporary Aide for Needy Families, Bingo, Clinic Maintenance and Janitorial. The KTC Council is composed of a President, Vice-President, Secretary/ Treasurer and 2 Council Members. Terms are three years. Prior to 2006, KTC was known as the Kotlik Traditional Council.

Hamilton Tribal Council

The Native Village of Hamilton has 29 enrolled tribal members. Although Hamilton was once a settlement, it now serves as a seasonal subsistence camp which is accessed by boat or floatplane. The Native Village of Hamilton maintains an office in Kotlik and is governed by a five member Council.

Native Village of Bill Moore Slough

The Native Village of Bill Moore's Slough has 109 enrolled tribal members. Bill Moore's Slough is located southwest of Kotlik on the left bank of Apoon Pass. The site was first reported as *Konogkelyokamiut* by R.L. Faris of the U.S. Coast & Geodetic Survey in 1899. According to the U.S. Census, there were 32 residents living in Bill Moore's Slough in 1961. Like Hamilton, Bill Moore's Slough is now a seasonal subsistence camp accessed by boat or floatplane. The Native Village of Bill Moore's Slough maintains an office in Kotlik and is governed by a five member Council.

Kotlik Intertribal Court

The Kotlik Inter-Tribal Court was formalized upon adoption of tribal ordinances in 2003. Tribal court judges carry tremendous responsibility as they are entrusted to protect the well being of the community, in particularly children. They are uniquely positioned to improve the justice system in rural communities and thus are expected to observe high ethical standards.

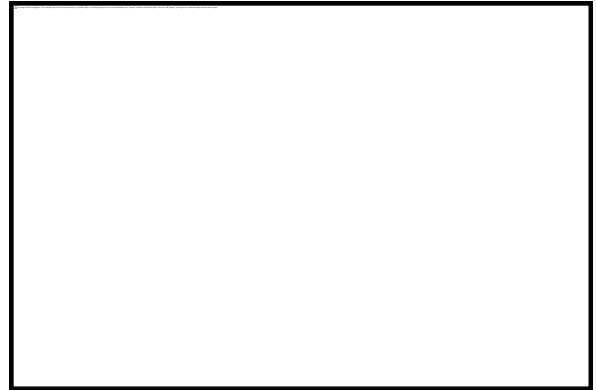
City of Kotlik

The City of Kotlik, incorporated as an Alaskan second class city in 1970, has a population of 588 residents (State of Alaska DCED certified in 2004) of which about 96% are Yup'ik Eskimo. The Kotlik Utility Board and Kotlik Utilities are subsidiaries to the City of Kotlik. The Utility Department operate Kotlik Electric Service, Kotlik Water & Sewer, Washeteria and Kotlik Cable. Aside from the services listed below, the City offers Bingo once or twice a week.

Kotlik Yupik Corporation

The Kotlik Yupik Corporation (KYC) incorporated one year after the passage of the Alaska Native Claims Settlement Act (ANCSA) of 1971. With 220 shareholders, KYC has a land entitlement of 115,200 acres. ANCSA stipulated that communities select allowable acreages on a contiguous basis from allocated townships. Townships are typically 36 square miles, however due to circumferential adjustments to earth's design, Kotlik was

allowed selections from two rows of 6 square mile townships (Kateel River Meridian and Seward River Meridian). As a result of this disparity, Bill Moore's Slough and Hamilton were allowed to form their own village corporations, Nunapiglluaq Corporation and Kongnikilnomiut Yuita Corporation. The Kotlik Yup'ik Enterprise (KYE) is a subsidiary of KYC. KYE has two businesses that include the Kotlik Laufkak and Kotlik Tank Farm



Qerrulligmiut Foundation

The Qerrulligmiut Foundation (QF) was formed in 2000 as Kotlik's local nonprofit. QF was founded largely because members of the fisheries planning committee realized that governmental entities and village corporations would be ineligible for grants in years which they were awarded projects. QF was established exclusively for educational and charitable purposes such as helping residents with emergencies and higher education scholarships. QF has applied for 501(c)(3) status from the Internal Revenue Service in order to access funding from corporations and other entities willing to provide awards in lieu of paying taxes.

Critical Needs in Kotlik

Housing:

- Housing
- Kotlik Housing Authority

Infrastructure:

- Water & sewer expansion
- New landfill
- Dock facility
- Street lights
- Electrical pole upgrades
- Airport IFR lights
- Airport passenger terminal
- Heavy equipment
- Heavy equipment storage/shop
- Alternative energy

Community Facilities:

- Head Start building
- Inter-Tribal Court building
- Child care facility
- Elder care facility
- Health & fitness center
- Community complex
- Public safety building
- Youth/teen center
- Cultural/arts & crafts center
- Cemetery improvements
- New clinic

Transportation/Waterfront Development:

- Roads
- Boardwalk improvements
- Bridges
- River bank erosion control
- Dock facility
- Dredge channel at north mouth

Commercial/Economic Development:

- New store
- Hotel
- Restaurant
- Fuel delivery
- Recycling center
- Tourism
- Reindeer husbandry
- Regional postal hub
- Gravel quarry

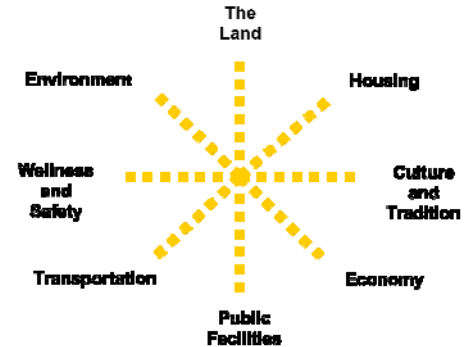
Tribal Programs/Services/Training:

- Kotlik Realty Services
- Healing circle
- Training for Village Public Safety Officers, fire fighters, land managers, accountants, administrators, teachers, health care providers, heavy equipment operators, computer technicians, tourism operators, guides and boat operators

Goals & Priorities for the Future of Kotlik

RurAL CAP's planning model is organized around eight planning dimensions including: The Land, Housing, Culture and Tradition, Economy, Public Facilities, Transportation, Wellness and Safety, and Environment.

The planning dimensions are fluid in that assets may fit into more than one dimension, and that communities can add or subtract dimensions as deemed necessary to meet local needs. Community plans based on this tool meet the requirements of the Denali Commission and other funders for a general community plan.



Kotlik's goals are not listed in order of priority.

Culture & Tradition

- *Kotlik maintains our cultural and traditional values based on our elders wisdom.*

Housing

- *Kotlik has adequate, safe, and affordable housing located in environmentally stable locations.*

Transportation

- *Kotlik has a transportation system that safely moves school-age children, elders, the disabled and low income residents from place to place within and around the community.*

Economy

- *Kotlik has a viable economy that promotes local hire, provides a stable living environment, and supports subsistence life.*

Public Facilities & Utilities

- *Kotlik has adequate, safe and well-maintained public buildings and infrastructure for our growing community.*

Wellness & Safety

- *Kotlik has a safe and healthy community for the benefit of maintaining our cultural values.*

Environment

- *Kotlik residents respect our land and strive to protect it from erosion and contamination.*

Land

- *Community members continue the tradition of respecting each other and preserving the land and its cultural resources.*

Culture & Tradition

Kotlik is predominately a Yup'ik community. Residents practice a subsistence lifestyle harvesting beluga whale, seals, walrus (occasionally), caribou, moose, migratory and resident birds, and various fin-fish species. A value embedded in all our tribal members is respect for the environment, fish, and wildlife. Conscientious stewardship will ensure continued replenishment of our land, sea and environment where we harvest resources for the sustenance of the people.

Kotlik hosts several potlatches a year where neighboring communities are invited to share in Eskimo dancing, gift giving and storytelling. A highlight of the event is the introduction and initiation of young dancers whose traditional Eskimo names (a name taken at birth after a deceased member) are announced. During this presentation, gifts are presented to the surviving relatives and friends of the deceased. This special honor is a means of paying tribute to the deceased as well as promoting healing among surviving relatives.

Kotlik has experienced tremendous growth in the past 45 years. The community has witnessed the change from using dogsleds to snowmobiles; wooden skiffs to aluminum boats; Coleman lanterns to electricity; log/driftwood homes to modern homes built on steel pilings; verbal communication to the internet; and weekly or monthly plane service to daily plane service from multiple carriers. Yet in spite of all these new amenities and technologies, our residents still depend heavily on a traditional subsistence lifestyle. Our ancient teachings of supporting and respecting one another, the land, sea, flora and fauna continue to be taught to new generations.

Culture & Tradition Goal: Kotlik maintains our cultural and traditional values based on our elders wisdom.

- *Objective:* Preserve the Yup'ik language
 - *Activities:*
 - Expand existing Yup'ik Immersion Program
- *Objective:* Promote cultural learning experiences
 - *Activities:*
 - Host Yup'ik culture camp(s)
 - Develop a cultural center where classes can be taught
 - Encourage “traditional” parenting skills
- *Objective:* Teach and practice subsistence values
 - *Activities:*
 - Observe catching/hunting limits
 - Dispose of trash properly
 - Teach hunting/fishing safety and survival skills

Housing

Kotlik is located at the confluence of the Kotlik River and the Little Kotlik River. Nineteen houses are located across the Kotlik River away from the main village. According to the 2000 U.S. Census, there were 139 total housing units in Kotlik. Of the 117 occupied units, 101 units were owner occupied, 16 units were rentals and 22 units were used seasonally. The average household occupied 5.05 persons. Heating methods included 90.2% Kerosene and 9.8% wood.

There are 42 homes built by residents for private use. The Bureau of Indian Affairs (BIA) constructed 8 houses over a period of several years. The first public housing project in Kotlik occurred in the 1960's and was followed by several phased developments:

- 1960s** Alaska State Housing Authority - 16 units
- 1982** U.S. Housing and Urban Development - 29 units
- 2000** Association of Village Council Presidents Regional Housing Authority - 19 units
- 2004** Native American Housing & Self-Determination Act - 7 units

The demand for single and multi-family housing has increased as Kotlik's population has grown in recent years. The Association of Village Council Presidents Regional Housing Authority plans to construct two triplexes in 2010

Housing Goal: Kotlik has adequate, safe, and affordable housing located in environmentally stable locations.

- *Objective:* Explore alternative housing models to meet a range of needs
 - *Activities:*
 - Explore apartment style housing
 - Encourage guest/visitor lodging (example: bed & breakfasts)
 - Promote local hire on housing projects
- *Objective:* Address elder housing needs
 - *Activities:*
 - Explore development of an assisted living home
 - Provide adequate elder housing at low or no cost
- *Objective:* All community members have safe housing
 - *Activities:*
 - Continue housing improvement and weatherization programs
 - Relocate the 20-30 homes in areas of high erosion

Transportation

Kotlik does not have any gravel roads. A boardwalk for pedestrians and motorized vehicles was built with a surplus of U.S. Housing and Urban Development electrification funds in 1979. KTC receives BIA Indian Reservation Road funding for the planning, design, construction and maintenance of transportation related projects (including boardwalks and trails). KTC recently received over 2 million dollars to construct a 5,200 foot boardwalk. The local transportation program is also responsible for completing a transportation inventory, identifying local transportation needs, and funds administration. KTC was also initially assigned the responsibility of posting snowmobile trail markers up to mid-point between Kotlik and Emmonak as well as Kotlik and Stebbins.



Kotlik residents often travel by boat or ATV's in the summer and snow machines in the winter. All other passenger and cargo transportation is by air. The State of Alaska, Department of Transportation constructed a new 4,422 x 100 foot runway in 2000. Bulk fuel and heavy cargo are brought in seasonally by barge.

Transportation Goal: To have a transportation system that safely moves school-age children, elders, the disabled and low income residents from place to place within and around the community.

- **Objective:** Improve village transportation infrastructure
 - **Activities:**
 - Repair boardwalk along the river
 - Construct boardwalks where needed
 - Build a bridge for residents that live across the Little Kotlik River
 - Continue inventorying trails and roads through Indian Reservation Roads Program
- **Objective:** Build transportation emergency preparedness
 - **Activities:**
 - Obtain proper search and rescue equipment
 - Develop a plan for evacuation road(s)
- **Objective:** Explore inter-village transportation options
 - **Activities:**
 - Investigate potential for inter-village roads
 - Prioritize desired inter-village roads

ECONOMY

Kotlik's local economy has historically been based on hunting, trapping and fishing. During the gold rush era (late 1800s - early 1900s), selling wood to passing steamboats was the only available source of income. The following section explores both current and prospective economic development opportunities in Kotlik.

Gravel Quarrel

Gravel is currently barged into Kotlik from St. Mary's or Nome. In 2000, the average cost of imported gravel was \$90/per cubic yard. Developing a local quarry would significantly lower the cost of gravel in addition to creating jobs. Kotlik needs gravel roads to accommodate future growth. Currently, construction projects are often kept "on-hold" until the ground is sufficiently frozen to allow heavy equipment to traverse the land. Unfortunately, this results in a loss of income for residents work seasonally to support fall subsistence activities and to purchase fuel for winter months. Hogback Hill, located 15 miles from Kotlik, sits atop volcanic rock which has a higher degradation factor and therefore may be a better material for roads and bank erosion reinforcement.

Tourism

Tourism has been discussed in Kotlik since the late 1980s - early 1990s. At that time, residents felt that tourism could only be considered after the airport was improved and such amenities as water and sewer, visitor lodging, and electrical service was available. All of those up-grades have since occurred with the exception of visitor lodging.

Possible visitor attractions include traditional seal hunts, berry picking, fishing, dog sled rides, plant collecting, wildlife viewing, fish camps, and bird watching (the Yukon Delta fan is one of the largest bird nesting habitats in the world). We envision tours being led by local licensed boat operators with six-pack licenses. Trained guides could provide information about the Yukon Delta, its residents, and habitat.

Kotlik is interested in constructing a multi-use facility which would house a cultural center. Such a center would provide a space for tourists to view traditional art, crafts, tools, clothing, and televised monitors with information about the local environment. The center could also serve as a work area for local artists to make and sell their goods.

The Yukon Delta Fisheries Development Association (YDFDA) completed a two-phase report that explored the potential of cultural tourism in the region. The Kotlik Yupik Corporation Board of Directors appointed a representative to attend various tourism conferences in Emmonak and Bethel. The conferences are expected to continue until a business plan is developed and a business license acquired.

Oil & Gas Exploration

Many community members would like to see incremental, safe exploration on-shore before any off-shore is attempted. Residents are also in favor of shallow natural gas exploration on or near the city of Kotlik as a means to supplement the electrical generation plant and homes.

Fisheries

Kotlik's position on the Yukon Delta fan makes it one of the first communities to make contact with the oil rich ocean salmon. King salmon and summer chum are the most marketable fish harvested from the Yukon River (Kings have 20% higher oil content than any other salmon in the world). Other available fish species include: chee fish, bering cisco, black fish, tom cod, pike, white fish, coho fall chum and pinks.

There are two large fish processors in the Emmonak area which have been in existence since the early 1960s. Kotlik is interested in developing a seafood and meat processing plant with modern equipment including a fast freeze system. The fast freezer system features a continuous-feed trolley freezing process that dramatically reduces freeze times and labor costs compared to conventional "batch" freezers. We envision processing salmon using the following methods: freezing, canning, filleting, smoking, salting, and pickling.

A seafood and meat processing plant in Kotlik would create jobs, bring additional tax revenue into the City, and enhance the quality of life for residents. Harvesting salmon is critical to Yukon Delta residents. Fishermen take pride in their ability to provide for their families during a good commercial harvest. Correspondingly, bad commercial harvests are often followed by an increase in social ills including alcohol abuse, neglect, depression, physical abuse and suicide.

The Yukon Delta Fisheries Development Association (YRDFA) obtained a grant from the Economic Development Administration which provided Kotlik fishermen with an ice machine, small generator and insulated totes. YDFDA is currently doing an exploratory fishery off Yukon Delta shores to determine the feasibility of a crab and halibut commercial fishery.

Nine residents of Kotlik hold herring permits. The Norton Sound herring fishery is the last herring fishery of the season for the Pacific/ Bering Sea areas. The season is sporadic and may be as short as two 2-hour openings or as many as four 6-hour opening. Herring prices are typically around \$200/per metric ton unless the stock is low then prices can rise to \$1200/per metric ton.

Two or three residents have participated in the Norton Sound crab fishery. Nome is the only port in the region that receives fresh, live crab for processing and transport to commercial markets. If Kotlik had a processing facility, it may be more cost effective to crabbers to deliver their crabs there instead of Nome.

A significant threat the proposed processing facility is the declining Yukon River salmon fishery. In 1999, the Yukon River commercial salmon fishery recorded the lowest harvest level (catches were lower than the disaster declared in 1998). Many Kotlik fishermen did not catch a single salmon. There were two commercial openings in 2000 with dismal catches and no commercial opening in 2001. Political pressure is mounting from up-river communities and Canada to eliminate the commercial salmon fishery on

the Yukon Delta. The fishery remains critical to Kotlik and is the only means of income for many of our fishermen..

Economy Goal: To have a viable economy that promotes local hire, provides a stable living environment, and supports subsistence life.

- *Objective:* Explore economic development opportunities that utilize local talent and resources
 - Activities
 - Look into tourism based on fishing and/or bird watching
 - Investigate feasibility of a fish processing facility (cannery)
 - Encourage locally owned bed and breakfasts
 - Obtain technical assistance with commercial crab and shrimp harvesting

- *Objective:* Match economic/employment opportunities with community needs
 - Activities
 - Elder and Low Income Meal Program - Community Gardening Program
 - Day Care Services - Early Childhood Program
(Other needed positions include: swimming lessons, cultural teachers & advisors, elder assistance/ homecare providers, garbage collector, night patroller and wildland firefighters)

- *Objective:* Create or continue programs to offset economic hardship
 - Activities:
 - Access more energy assistance
 - Encourage local hire whenever possible
 - Continue and expand the Summer Youth Temporary Employment Program (STEP)
 - Provide on the job training services throughout the year

Public Facilities & Utilities

Kotlik has a piped vacuum sewer and circulating water utilidor which connects to fifty-one residences. The nineteen households located across the Kotlik River are not connected and thus haul treated water from the washeteria, collect rainwater, and melt ice. The City provides honey bucket haul service to those residences for \$25/per month (fees are determined by the Kotlik City Council).

The new power generation plant was constructed in 2002. The plant has two 275kw generators and two 420kw generators with automated sensors that detect changing electrical needs. The plant was constructed on steel pilings elevated above the flood line. Funding for the \$2.06 million dollar project was provided by the Denali Commission, Environmental Protection Agency, and State of Alaska. The plant has single and three phase capability. Electricity is provided by Kotlik Electric Service at a rate of \$0.40/kw residential and \$0.60/kw commercial. The State of Alaska Power Cost Equalization program provides a subsidy to residential users. Many of the older telephone poles have sagging lines and non-functioning lights both of which poses safety concerns.



Telephone and cellular service is provided by United Utilities Inc. (UUI). Cable television is offered by the City of Kotlik Utilities Department for \$36.05/per month.

The Kotlik Tank Farm was established in 1982 when four steel 50,000 gallon U.S. Airforce surplus tanks were floated down the Yukon River from Fort Wainwright. Several years later, their competitor the Alaska Commercial Company ceased selling fuel and the Kotlik Tank Farm became the sole commercial fuel supplier in Kotlik. An Economic Development Plan was completed in 1998 which identified the need for a consolidated bulk fuel tank farm. The Consolidated Bulk Fuel Tank Farm project was a cooperative effort between the Kotlik Yupik Corporation, City of Kotlik, Kotlik Tribal Council, Alaska Industrial Development and Export Authority, and Alaska Energy Authority. The tank farm is located downriver from the village on Kotlik Yupik Corporation land. The Corporation owns four 48,000 gallon tanks and is the commercial fuel supplier for the village. The City owns five 48,000 gallon tanks (the Lower Yukon School District leases one tank). An underground distribution pipe extends approximately 5,200 feet from the tank farm to an intermediate tank at the Power Generation Plant.



In 1976, the store Kotlik Laufkak (formally called "KBH") opened as a partnership between the three local village corporations. Hamilton's corporation withdrew from the

partnership in 1985 followed by Bill Moore Slough's corporation in 1987 leaving Kotlik Yupik Corporation (KYC) as the sole owner. Intense competition with the Alaska Commercial Company store kept Kotlik Laufkak's profits marginal or at loss bases. In April 2004, KYC entered into a management agreement with the Alaska Native Industries Cooperative Association, Inc. (ANICA). ANICA now handles the staffing and inventory of Kotlik Laufkak.

Public Facilities & Utilities Goal: To have adequate, safe and well-maintained public buildings and infrastructure for our growing community.

- *Objective:* Pursue airport improvement projects
 - *Activities:*
 - Develop a new gravel quarry
 - Work towards a crosswind airport
 - Build a terminal for passengers
 - Add fencing and more lights for safety purposes

- *Objective:* Address aging infrastructure issues
 - *Activities:*
 - Pursue funding for boardwalk maintenance and repair
 - Renovate or build teen center and purchase equipment
 - Remove old, abandoned buildings

- *Objective:* Increase community spaces
 - *Activities:*
 - Develop capacity and secure funding to address the need for community spaces for:
 - ◆ Public safety (example: police, fire, and safe house)
 - ◆ Community use (meeting hall, gym/recreation center, food bank, village corporation office, Head Start, and church)

Wellness & Safety

The Yukon-Kuskokwim Health Corporation (YKHC) is the regional healthcare provider authorized by 58 tribes to negotiate with the Indian Health Service. The YKHC system consists of a hospital in Bethel, 5 sub-regional clinics (Aniak, Emmonak, Hooper Bay, St. Mary's and Toksook Bay), and 47 village clinics. YKHC is responsible for training and employing community health aides in Kotlik to provide acute and chronic health services with telecommunication assistance from Bethel-based physicians.

Kotlik received Project Code Red equipment in 2003 through the support of the Denali Commission. For 28% less than what it would cost to buy a fire truck, the Project Code Red storage unit contains fire fighting supplies and materials which can be hand carried or transported by ATV to the scene of a fire. Fire response in Kotlik is volunteer-based and residents need training in using the equipment.

The Kotlik Youth Council was formed in 2004 after the idea was raised by Cyrilene Mike. The following youth were the first to be elected to serve on the Kotlik Youth Council: Cyrilene Mike (President), Fredrika Prince (Vice President), Della Hendrickson (Secretary/Treasurer), Eileen Matthias (Member) and Victor Tonuchuk, Jr. (Member). Member rules and responsibilities are set forth in an ordinance. During the summer of 2005, the Kotlik Youth Council sponsored a tournament to raise money to purchase a brand new monitor for the local teen center.

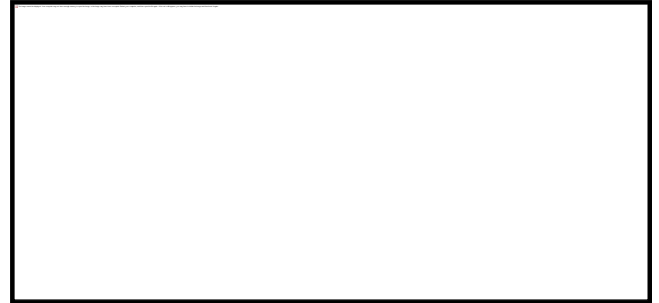
Kotlik has several Village Police Officers (VPOs) who are trained and employed as first responders to public safety emergencies such as search and rescue, fire protection, emergency medical assistance, crime prevention and basic law enforcement.

Wellness & Safety Goal: To have a safe and healthy community for the benefit of maintaining our cultural values.

- *Objective:* Support the physical and spiritual health of community residents
 - *Activities:*
 - Ensure adequate access to behavioral health services
 - Provide a village “safe house” for victims of domestic violence
 - Offer more prevention programs in the areas of suicide, drug and alcohol use (particularly during pregnancy)
 - Secure funding for more physicians assistants, health aides and home care providers
- *Objective:* Encourage more wellness activities for Kotlik’s youth
 - *Activities:*
 - Look into developing a space specifically for youth
 - Provide opportunities for elders to counsel the youth

Environment

Kotlik is located across the river and accessible only by boat and/or snowmobile and the new site is to be located in the main town site vicinity. Each household brings their own trash to the landfill. Since trenching and burying is difficult in the area, the City is considering an incinerator and recycling to reduce the quantity of solid waste. The existing landfill is being closed. A Master Plan is underway to examine needed improvements.



Environment Goal: To respect our land and protect it from erosion and contamination.

- *Objective:* Reduce the amount of waste in open dump
 - *Activities:*
 - Secure funding for a burn box and operator
 - Continue backhauling old refrigerators
- *Objective:* Reduce local energy costs
 - *Activities:*
 - Explore the feasibility of using renewable energy sources in Kotlik
- *Objective:* Manage erosion along the Little Kotlik River
 - *Activities:*
 - Research and pursue effective erosion control strategies
- *Objective:* Protect public health
 - *Activities:*
 - Address untreated waste issues associated with the lagoon

The Land

To the Kotlik community, subsistence means harvesting local vegetation, berries, fish, land and sea mammals and birds for food, clothing, and tools. Ancient practices of surviving off the land and the sea continue to be an integral part of communal life. Most households prefer to gather and store traditional foods rather than rely on store bought foods which are not only expensive but high in preservatives. Seasonal subsistence camps are used to harvest berries, fish, birds and various mammals. Camps can be temporary (tents) or permanent (cabin and smoke house). Most are situated at native allotments or on approved sites owned by the village corporation or federal government.

Expansion is needed to accommodate future growth in Kotlik. Lots need to be platted for new housing and community development projects. The Kotlik Yupik Corporation is currently in the ANCSA 14(c) land reconveyance process. The City of Kotlik has land disposal ordinances and formal requests for land acquisition need to be read in City Council meetings.

A community map is included in Appendix A. The Yukon Delta Fisheries Development Association also financed the development of a digital map for Kotlik which is available in CD format.

The Land Goal: To continue the tradition of respecting each other and preserving the land and its cultural resources.

- *Objective:* Consider relocation of Kotlik
 - *Activities:*
 - Survey private/public properties

- *Objective:* Address local environmental hazards
 - *Activities:*
 - Access a contamination specialist
 - Cleanup surrounding water
 - Address drainage around houses/buildings by digging ditches and filling with gravel

Implementation

The Kotlik Planning Board will serve in an advisory role to address the short and long term planning needs of Kotlik. The Kotlik Planning Board should have representation from each local entity to strengthen team-building and eliminate duplication of efforts. A good Planning Board will engage Kotlik residents in projects that affect the community and region.

Kotlik Planning Board Guidelines:

- 1) *Community Support:* A planning effort must have the backing of the community and leadership. Residents and local entities should encourage the Planning Board's efforts to make Kotlik a better place to live.
- 2) *Board Members:* The Planning Board should consist of 5 to 7 members appointed by the following organizations: City, Kotlik Tribal Council, Native Village of Bill Moore's Slough, Hamilton Tribal Council, Kotlik Yupik Corporation, and Kotlik Utilities. Village administrators, utility workers and individuals with knowledge of the political process would be ideal choices.
- 3) *Funding:* The Planning Board should have a budget to pay a planning coordinator.
- 4) *Projects:* The Planning Board should monitor the status of projects identified in this plan.
- 5) *Regional & State Coordination:* The Planning Board should invite Regional and State agencies to attend their meetings.
- 6) *Project Assignments:* The Planning Board should assign a lead person or entity to each project to ensure accountability.
- 7) *Public Meetings:* All Planning Board meetings must be open to the public. The meetings will provide an opportunity for discussion and questions. Meeting minutes should document any projects discussed.
- 8) *Calendar:* The Planning Board should develop a calendar of meeting dates to be shared with all local entities. Calendars can also include application deadlines, project timelines, regional and state events, and community gatherings so as not to assign conflict with other events.
- 9) *Follow-up:* The Planning Board should periodically follow-up on the projects contained in this plan and any new projects that are identified in the future.

Appendices

Kotlik Community Map

Community Facilities Inventory/Strategy

Housing Inventory/Strategy

Fisheries Infrastructure Inventory/Strategy

Available Lands & Suitability Analysis

Contacts

Appendix A: Kotlik Community Map





Appendix B: Community Infrastructure Inventory/Strategy

Kotlik's community infrastructure inventory/strategy was reviewed and approved by the Kotlik Planning Board in 2006. The inventory/strategy is organized by short term/ST (1-5 years), mid-term/MT (6-10 years), and long-term/LT (11-20 years) projects.

Bulk Fuel Tank Farm - ST

The Consolidated Bulk Fuel Tank Farm was built in 2000-2001 as a cooperative effort between the Kotlik Yupik Corporation (KYC), City of Kotlik, Kotlik Tribal Council (KTC), Alaska Industrial Development and Export Authority, and Alaska Energy Authority. KYC owns four 48,000 gallon tanks and is the local commercial fuel supplier. The City owns five 48,000 gallon tanks. An underground distribution pipe extends approximately 5,200 feet from the tank farm to an intermediate tank at the Power Generation Plant.

Compliance with State & Federal Agencies: The tank farm has an approved U.S. Coast Guard Operations Manual, Index to 33 CFR 154.310(a). All storage and dispensing tanks comply with the Uniform Fire Code as adopted by the State of Alaska. The facility also maintains an EPA Spill Prevention Control and Countermeasure Plan, and a Facility Response Plan as required by the EPA.

Future Needs: KTC, KYC and the City need to formalize an Operations and Maintenance Agreement to manage the common property and related equipment. Lead agency: KYC.

Emergency Hunting Shelter - ST

There are no emergency hunting shelters in the Yukon Delta area. Fish camp structures are sometimes used as temporary shelter during emergencies. A cabin near Pt. Romanoff was often used by travelers between Kotlik and St. Michael/ Stebbins however the site later became a Native Veteran Allotment.

Future Needs: Emergency hunting shelters are needed at strategic locations along primary winter trail routes. Lead agency: Kotlik Tribal Council.

Power Generation Plant - ST

Built in 2002, the Power Generation Plant is owned by the City of Kotlik. The plant has two 275kw generators and two 420kw generators. Funding for the \$2.06 million dollar project was provided by the Denali Commission, Environmental Protection Agency (EPA), and the State of Alaska. The plant has single and three phase capability. Electricity is provided by Kotlik Electric Service at a rate of \$0.40/kw residential and \$0.60/kw commercial. The State of Alaska Power Cost Equalization program provides a subsidy to residential users.

Future Needs: Power poles need to be upgraded and the lights replaced. Lead agency: City.

Airport - ST

The state-owned 4,422' long by 100' wide gravel airstrip was constructed in 2002.

Future Needs: Heated passenger waiting area/terminal is needed. Lead agency: City.

Public Safety - ST

The Public Safety Building was constructed in 1989 through a grant from the State of Alaska. At less than 600 square feet, the facility has an office, bathroom and 3 holding cells. The facility lacks space for visiting troopers or for storing search and rescue equipment. The building is in poor condition.

Future Needs: A multi-purpose public safety building to house a fire hall, city jail, search and rescue, visiting trooper housing, and tribal court is needed. Lead agency: City.

Alternative Energy - MT

There have been several community discussions regarding the potential for wind generation, solar energy, natural gas, and various types of hydroelectric energy including tidal energy in Kotlik. With the increasing cost of fuel, the development of alternate energy is imperative.

Future Needs: Explore the potential for natural gas and wind, solar, tidal energy. Lead agency: Kotlik Tribal Council.

Boardwalks - MT

The original boardwalk was built in 1980 using excess U.S. Housing and Urban Development electrification funds. Constructed of 2" x 6" boards, the boardwalk was intended to transport freight between the airport and the community. Today, boardwalks are also used by pedestrians and ATV's. The Bureau of Indian Affairs (BIA) recently provided \$2.4 million to replace 4,100 feet of boardwalk in Kotlik.

RP Kinney & Associates developed a new design which elevates the boardwalk to 30" high. The design does not include steps or rails for pedestrians nor does it include ramps for other vehicular cross traffic such as snowmobiles, ATV's, or heavy equipment. Community members are concerned with the function, maintenance and liabilities associated with the new design. Children and elders may be susceptible to falling off the boardwalk, particularly when ice builds up in the winter. Community members favor the use of duramats which reduce long term maintenance and liability.

Future Needs: A new boardwalk is needed. Lead agency: Kotlik Tribal Council.

Water & Sewer Plant - MT

Kotlik's piped vacuum sewer and circulating water utilidor system was constructed in 2001. Households located in the main village are connected to the system while households located across the Kotlik River are not. Those residents haul treated water from the washeteria, collect rainwater, melt ice, and haul honeybuckets to containers.

Future Needs: According to the *Alaska Native Tribal Health Consortium Water & Sewer*

Feasibility Study for Kotlik, the preferred alternative to extend water & sewer services across the Kotlik River is to construct an under-river extension of the existing system from the central water treatment plant. Water would be delivered in above-ground heated insulated utilidors to each residence. Individual sewage grinder pumps would be located at each residence pumping sewage back in a separate line through the above-ground heated insulated utilidors and to the under-river force main. The under-river force main would then deliver sewage to the existing above-ground heated pipe and finally empty into the existing central sewage treatment lagoon. Lead agency: City.

Open Dump - MT

Kotlik has an open dump which dates back to the 1970's. Located one mile upstream from the village, the dump is only accessible by boat in the summer and snowmobile or ATV in the winter. Approximately 117 households, 2 commercial stores and 23 local organizations use the dump to dispose of their solid waste. The dump is reaching maximum capacity.

In 1998, the City swapped 5 acres of municipal land for 6.41 acres of Kotlik Yupik Corporation lands. The Bill Moore's Slough Elders Council was appointed in 2006 as the lead entity to pursue funding for a new landfill since they were actively pursuing grants for a burn box grant and a Solid Waste Management Plan.

Future Needs: The existing dump is in the process of being closed. The proposed site for a new landfill is located one mile downstream from the village, east of the new runway and approximately 150 feet from the south bank of Apoon Pass. The site was chosen based on several considerations including required distance from the airport, proximity to Kotlik, and soil conditions. Consideration was also given to how garbage will be collected, transported and deposited from the households across Kotlik River. Since trenching and burying is difficult in Kotlik, the City is considering an incinerator to reduce the quantity of solid waste. Recycling of different wastes such as cardboard, aluminum, steel, newspaper and reuse of used appliances and furniture would also help reduce the volume of solid waste. Lead agency: Native Village of Bill Moore's Slough.

Emergency Shelter - MT

Kotlik does not have an emergency shelter. Community members requiring emergency protection are typically placed in private homes until they are able to travel to the Emmonak Women's Shelter or the Tundra Women's Shelter at Bethel.

Future Needs: As Kotlik grows, the need for an emergency shelter increases. Several residents volunteer their homes to victims however these homeowners are not always available due to personal travel or subsistence harvesting. Lead agency: City.

Assembly of God Church - MT

The Assembly of God Church was constructed in the 1970's.

Future Needs: A new church is in the planning process. Lead agency: Assembly of God.

St. Joseph Catholic Church - MT

Built in the mid 1960's, the St. Joseph Catholic Church is an aging facility. The foundation has been repaired multiple times and the forced air furnace is so dated that the church is unable to find parts for it. The maximum capacity of the building is 300 which is too small for most funerals, weddings and holiday events. The church is owned by the Roman Catholic Church, Diocese of Fairbanks and the Catholic Bishop of Northern Alaska.

Future Needs: A new church as well as a boardwalk from the river to the cemetery is needed. Lead agency: Kotlik Parish Council.

Kotlik Municipal Building - MT

The Kotlik Municipal building was built circa 1975. The total square footage is 2,400.

Future Needs: The Kotlik Municipal Building is 35 years old and has exceeded its useful life. Some or all of the existing functional space could be converted into a larger multi-purpose facility. Lead agency: City.

Kotlik Tribal Office - MT

The Kotlik Tribal Office was built in 1999. The total square footage is 780.

Future Needs: Due to the small size of the facility, some of the tribal offices are located in the Kotlik Municipal Building. The former clinic may also house some tribal offices in the future. A new Kotlik Tribal Office is needed. Local agency: Kotlik Tribal Council.

Community Hall - MT

The community hall was constructed around 1978 and later expanded through four separate additions. The square footage is 2,700. The hall sits on a post and pad foundation and is subject to shifting as a result of the frost.

Future Needs: The Hall has exceeded its useful life and is energy inefficient. A new Community Hall is needed. Lead agency: City.

Youth Center - MT

The Kotlik Teen Center was constructed in the early 1980's and although the building has undergone several revisions, its dilapidating state constitutes a safety hazard.

Future Needs: A new youth center is needed. Lead agency: City.

Early Childhood - MT

Kotlik does not have an Early Childhood facility. In the 1980's, the Kotlik Tribal Council received an Indian Community Development Block Grant to support a Battered Persons Shelter/ Day Care Facility. Unfortunately, the Council was unable to secure operational funds and the building was transferred to the City to be used as a clinic.

Future Needs: An early childcare facility is needed for working parents. Lead agency: Kotlik Tribal Council.

Headstart - MT

The current Headstart facility was built in the 1970's. The total square footage is 1,656.

Future Needs: A new Headstart facility is needed. Lead agency: Kotlik Headstart Parent Committee.

Fire Hall - MT

Kotlik received Project Code Red equipment in 2003 through the support of the Denali Commission. The Project Code Red storage unit contains fire fighting supplies and materials which can be hand carried or transported by ATV to the scene of a fire.

Future Needs: More residents need to be trained to use the equipment. A multi-purpose public safety building would be ideal to house a fire hall. Lead agency: City.

Heavy Equipment - MT

The City purchased a D-7 Cat in the 1980's however the machine has been stuck in frozen mud for the past several years.

Future Needs: As Kotlik grows, heavy equipment will be needed for the development of infrastructure, roads, and lots. Lead agency: City.

City Shop - MT

The city shop was formerly the Kotlik's first electrical generation plant (1982). The total square footage is 2,880. The Shop is now used to repair snowmobiles and ATV's and other general uses.

Future Needs: A new heavy equipment shop constructed above the flood plain is needed to adequately protect and store heavy equipment. Lead agency: City.

Docking Area/Barge Landing - LT

Kotlik does not have a designated barge landing. The barge typically drops off freight near the tank farm unless they are directed to another site. The community also lacks a boat harbor so residents tie their river boats and skiffs along the riverbank.

Future Needs: A designated docking area /barge landing is needed for freight delivery. A small boat harbor is also needed to shelter boats from high winds, tide and potential swamping. Lead agency: City.

Bank Erosion - LT

Kotlik loses approximately 3 feet of riverbank each year. Past attempts to control the erosion using concrete riprap failed. The first Northern Commercial Company store has been moved several times and the building is again in danger. The Army Corps of Engineers performed a feasibility study in June 2003 on Kotlik Riverbank Erosion.

Future Needs: Riverbank erosion control is needed to protect local buildings. Emmonak was successful in slowing erosion by barging rock and gravel in from Nome to stabilize their river. Lead agency: Kotlik Tribal Council.

River Access Routes - LT

The U.S. Coast Guard maintains a navigational beacon at the mouth of the Apoon Pass River however boaters still get stranded at low tide and have to wait until the next tide to enter the river. There is concern that stranded travelers may suffer hypothermia especially during the cold fall season. Kotlik has previously requested that dredging be placed on the State of Alaska 5 year plan.

Future Needs: The Apoon Pass river channel exiting to Pastol Bay and Norton Sound needs to be dredged 3 to 5 feet.

Trails - LT

In 2004, the Alaska Department of Transportation supplied Kotlik with tripod markers which are placed along winter trails to Emmonak and to Stebbins/St. Michael.

Future Needs: The more roads and trails included in a tribes "inventory", the more planning funds they are eligible for under the BIA's Indian Reservation Roads Program. Winter trails need to be recorded using a GPS to determine the exact half-way point between Kotlik and neighboring communities. Kotlik could inventory the half of the trail closest to our village while neighboring communities inventory the other half of the trail. Lead agency: Kotlik Tribal Council.

Roads - LT

Kotlik does not have any gravel roads.

Future Needs:

Kotlik needs to update its "inventory" for the BIA Indian Reservation Roads Program. A long range transportation plan is also needed to identify road priorities such as a new road to/from the airport and new landfill site. Lead agency: Kotlik Tribal Council.

Street Lights - LT

Street lights were installed in Kotlik around 1983. The original lights were amber lights which provided limited lighting. Some of the lights have since been replaced. Street lights are located on every other pole which poses a hazard to pedestrians during the dark winter.

Future Needs: Street lights are needed on every pole. Lead agency: City.

Multi-Purpose Facility - LT

Kotlik does not have a multi-purpose facility. Such a facility could provide much needed space for city, tribal, and inter-tribal court offices; cultural center; arts and crafts work area; computer lab; health and fitness room; day care; and adult learning center.

Future Needs: A joint effort by local entities is needed to pursue funding for a multi-

purpose building. Lead entity: Native Village of Bill Moore's Slough.

Cultural Center

A Cultural Center could offer tourists information about Kotlik's history, surrounding environment, and arts and crafts. A design using the *qasgiq* (a traditional meeting/bathing structure also used for Eskimo dances) motif could serve as an area to perform traditional Yup'ik dances.

Future Needs: A Cultural Center could be housed in a new multi-purpose facility or in the old high school.

Arts & Crafts Work Area- LT

An arts and crafts work area would provide the necessary space for local artists to continue the custom of making kayaks, fur parkas, seal skin boots, and other traditional arts. Such a space would help preserve these cultural practices for future generations as well as provide local artists access to tourists who could observe them working and possibly purchase art directly.

Future Needs: Grant opportunities for an arts & crafts work area need to be identified and pursued. Lead agency: Kotlik Tribal Council.

Computer Lab - LT

A computer lab available to the public would provide access to computers and internet.

Future Needs: A computer lab within a multi-purpose building would be appropriate. Lead agency: Native Village of Bill Moore's Slough.

Health & Fitness Room - LT

A health and fitness room with weights, treadmills, and other exercise equipment along with information on health, wellness and nutrition would help residents maintain a healthy lifestyle.

Future Needs: A small health and fitness room within a multi-purpose building would be appropriate. Lead agency: Kotlik Tribal Council.

Day Care - LT

A day care facility would benefit working parents.

Future Needs: A day care facility within a multi-purpose building would be appropriate. Lead agency: Kotlik Tribal Council.

Adult Learning Center - LT

The Association of Village Council Presidents normally employs a local resident to coordinate Adult Basic Education classes which are usually held at the Kotlik School.

Future Needs: An adult learning center within a multi-purpose building would be appropriate. Such a facility could offer much needed classes in: computer education, administrative skills: tax preparation: job training that leads to certifications in hazmat, asbestos abatement, tourism guides, boat operation and more. Lead agency: Kotlik Tribal Council.

Old High School - LT

The old high school was built circa 1977. Upon completion of the Kotlik School, the old high school was abated of hazardous material. All asbestos containing materials and other hazards were properly removed and disposed of. The windows were boarded up to prevent vandalism. The heating units are old and should be replaced.

Future Needs: The Kotlik Yupik Corporation (KYC) has expressed interest in gaining title of the Old High School from the State of Alaska. The building needs major renovation. KYC hopes to reuse the property for the following uses: rented office space, bed & breakfast, cultural center, and an arts & crafts work area. Lead agency: KYC.

Assisted Living Center - LT

Currently, some of Kotlik's elders are sent to Anchorage (500 miles away) to receive assisted living facilities. We hear stories of elders crying to return home when they see very few familiar faces in the city. As more residents reach elderly status or become disabled, the need for a local assisted living center increases. Such a center would allow elders to be cared for in a familiar environment where they have access to traditional foods. Lead agency: Kotlik Tribal Council.

Washeteria - LT

The washeteria was constructed circa 1982. Residents are able to access coin operated washers, dryers, showers and saunas. The interior has been renovated several times and the pilings have been settling into the ground however building shifting is becoming increasingly problematic.

Future Needs: A new washeteria should be considered. Lead agency: City.

National Guard Armory

Owned by the State of Alaska, Department of Military & Veteran Affairs, the National Guard Armory was built circa 1968. The 1,340 square foot facility has undergone several repairs and code upgrades overtime.

Post Office

The post office was built circa 2000. The 2,240 square foot facility is maintained and operated by the U.S. Postal Service.

Kotlik School

The Kotlik School was built in 2002. It is owned by the State of Alaska and operated by the Lower Yukon School District. The total square footage is 40,047.

Appendix C: Housing Inventory/Strategy

Kotlik's housing inventory/strategy was reviewed and approved by the Kotlik Planning Board in 2006.

The first lots parceled for housing developments in Kotlik were done by the Bureau of Indian Affairs in the late 1960's. Lot sizes have been become increasingly smaller as the community has grown. Most of the recently constructed homes in Kotlik are in good to excellent condition. The 29 Housing and Urban Development homes are in fair to good condition. The ASHA homes are in poor condition. There is need for more public housing as young couples are currently living in homes in poor condition.

Section 14(c)3 of ANCSA stipulates that village corporations must transfer land to municipalities for present and future needs. Upon construction of a new airport, ownership of the old airport was reverted to the Kotlik Yupik Corporation (KYC). Residents have aspirations of subdividing that land for future homes. KYC has not yet made any value determination of the site and a survey need to be completed.

Teacher Housing - ST

The Lower Yukon School District (LYSD) has 10 teacher housing units (3 duplexes and 4 single family units). The newer housing units are in excellent condition. The older duplex and single units are in good condition. Teacher housing is maintained by the LYSD maintenance staff who completes necessary repairs and/or remodeling during summer months.

Future Needs: The older housing units may need to be replaced. One unit was constructed in the early 1960's. Three of the single units were built in the late 1970's and have been remodeled several times. Lead agency: LYSD.

Multi-Family Housing - LT

The only multi-housing project in Kotlik is the teacher housing duplexes.

Future Needs: Multi-family units would decrease operation costs and it may provide an opportunity for private entrepreneurs to invest in rental apartments. Lead agency: Kotlik Tribal Council.

Appendix D: Fisheries Infrastructure Inventory/Strategy

Kotlik's fisheries infrastructure inventory/strategy was reviewed and approved by the Kotlik Planning Board in 2006.

Kotlik is located near the Norton Sound and the Yukon River fisheries. A few residents participate in the Norton Sound commercial herring fishery. In 2003, Kwikpak Fisheries leased land from the Kotlik Yupik Corporation to start a salmon buying station in Kotlik. Fish are iced in the round and shipped by air to Emmonak or Anchorage. Kotlik has approached the Yukon River Drainage Fisheries Association (YRDFA) about the possibility of a fish processing plant with value add capability. Such a plant would create more local jobs, especially for college students seeking additional income to supplement their school expenses.

Kotlik Laufkak

Owned by Kotlik Yupik Enterprises, Kotlik Laufkak was built in 1976. The Kotlik Yupik Corporation (KYC) has a 280' x 400' lot slatted for future development, namely a new store. The new store may also provide additional space for KYC offices and rental offices.

Future Needs: A new store is needed. Possible funding sources include the: Small Business Administration, Indian Community Development Block Grant, and loans. Lead agency: Kotlik Yupik Enterprises.

Gravel Quarry

In 1984, KYC had a gravel study completed which identified rock and gravel sources 14 miles from Kotlik. KYC is interested in leasing the site to the City or Kotlik Tribal Council to develop as a gravel quarry. The quarry could provide rock and gravel to Kotlik for erosion control, road construction, and lot improvement projects as well as be sold to neighboring villages.

Future Needs: The Bureau of Indian Affairs Roads and Trails Division may be able to finance the gravel quarry if Kotlik can access grants for roads. Lead agency: KYC.

Tourism

KYC is interested in a bed & breakfast and guiding operation for bird and wildlife ventures.

Future Needs: Boat operators with six-pack licenses and certified tourism guides.

Seafood & Meat Processing Plant

A seafood and meat processing plant with freezer van storage capacity would allow value-add fish processing/ packaging after closure of the commercial fishing season.

Future Needs: A seafood and meat processing plant would create additional jobs. Lead agency: City.

Appendix E: Available Lands & Suitability Analysis

The following is an excerpt from ANTHC "Kotlik Sanitation Facilities Feasibility Study Dec. 2003:

Geologic Setting

Kotlik lies at the northern edge of the Yukon-Kuskokwim delta and floodplain system, roughly 5 miles from the Bering Sea. The delta system forms a wide plain of moderate relief between 10 and 15 feet above sea level in southwestern Alaska. Low relief hills, remnants of dissected natural levees and sand dunes, are dispersed among flat-lying floodplain terraces and partially filled old river meanders. The region is primarily underlain by Pleistocene to recent fluvial deposits of dark gray silt and sandy silt, which are locally highly organic near the surface and typically become sandier with depth. These deposits appear to thicken westwards; however, the thickness is not well defined. Although the deposits are thought to be primarily fluvial in origin, they may include marine members. The region is relatively flat, poorly drained, and almost completely covered by tundra and numerous small lakes.

Kotlik is located in a subarctic zone near the boundary between continuous and discontinuous permafrost. Permafrost is defined as that part of the earth's surface where a temperature below 32°F has existed for two or more years. Permafrost in the Yukon Kuskokwim delta system is naturally relatively warm and will begin to degrade if the thermal regime is adversely impacted by modifications to the ground surface. The thickness of the active layer (the near-surface ground that undergoes an annual freeze-thaw cycle) is largely dependent upon soil type, ground cover, and snow depth. Frost penetration beneath areas kept clear of snow may exceed 10 feet. On the other hand, frost penetration in areas covered by organic material or snow is typically 3 to 5 feet or less.

The site lies within seismic zone 1 as previously defined by the Uniform Building Code. Alaska has adopted the International Building Code (IBC), which has approved a more modern process of defining an area's susceptibility to seismic damage. The IBC uses a system of ground motion and spectral response acceleration to indicate susceptibility to seismic damage. The ratings for Kotlik are shown in Table 3-5. Only few documented earthquakes of magnitude 6.0 or greater on the Richter Scale have been recorded in western Alaska, of which the 1958 Huslia earthquake (magnitude 7.3) is the largest. This shock reportedly produced extensive failures in surficial unconsolidated deposits. The second largest (magnitude 6.9) occurred in the Chukchi Sea in 1928. The nearest magnitude 6 or greater earthquake occurred more than 130 miles northeast of Kotlik in the southern Seward Peninsula. In general, the seismicity in western Alaska in the magnitude 2.0 to 5.0 range appears to be widespread and confined to relatively shallow crustal depths. The Yukon-Kuskokwim delta appears to be the least seismically active in western Alaska.

Table 3 5. IBC Seismic Designation Table.

Ground Motion Spectral Response Accel. % of Critical Damping Point Value*

Min. Considered for Alaska 0.2 sec. 5 25

Max. Considered for Alaska 1.0 sec. 5 8

IBC Seismic Sensitivity Rating taken from maps prepared for USGS/BSSC Project 97 by United States

Geologic Survey, Building Seismic Safety Council and Federal Emergency Management Agency

*Point value of spectral response acceleration expressed as a percent of gravity.

During conversations with the Village Council, it was explained that the land between the Kotlik River and the new runway has been getting dryer every year. The placement of fill to construct the runway, reaching almost to the river on the west, is cutting off the normal south to north drainage. It may be beneficial to the community to investigate this effect in relationship to potential development of the land between the runway and the river.

3.11 Subsurface Conditions

Soils

Soil conditions at Kotlik can be summarized as follows:

- Kotlik area soils are poor.
- Soils contain high amounts of water.
- Soils are soft silts and clays.
- The top 3 feet of soil is rich in peat.
- Soft soils continue to about 20 ft.
- Harder soils are found at about 40 ft.
- Soils present problems to construction.
- Thawed soils are too weak to support equipment.
- Drainage will flow into excavations, dewatering will be required.
- Work needing excavation is done in the winter.

Soils information obtained in geotechnical investigations conducted for design of the new school, recent sewer extensions and the new airport runway, indicate consistent and uniform soils conditions throughout the village area. Based on the consistency and uniformity of geotechnical conditions as reported, it is considered reasonably safe to extrapolate the reported conditions (for purposes of planning only) for sewer extensions to the islands. Copies of the essential elements of these reports are contained in Appendices C, D, E, F and G, and are summarized in Table 3-6. Locations of test holes are shown on Figure 3-10.

Figure 3 10. Geotechnical Study Test Hole Locations.

Table 3 6. General Summary of Soil Logs Data.

Shannon & Wilson H Gray & Assoc. RZA-Agra

(Investigation for

school, 1999) Blows (Investigation for

sewer const. 1980) (Investigation for runway, Feb, 1994))

(TH's 99-1 through 99-4) per ft. (TH's 1- 10) (TH's SB-1 to 31)

0 -3' Organic silts with traces of sand Organic silts with traces of sand

3 - 5.5' Peat rich Silt w/traces of sand Silt w/traces of sand

5.5 – 15' Silts w/traces of sand & peat 2 - 5 Silt w/traces of sand Traces of permafrost in some holes

15 - 19' Traces of permafrost in some holes

19 - 20' Consistently stiffer zone

19 - 42' Soft to med. stiff

Below 43' 23 - 34

Blows per foot reported are based on SPT. The conditions encountered during our subsurface explorations for the Kotlik Replacement School are believed to be typical of the village (Shannon and Wilson). Borings were taken in the area occupied by the new school. The new school is located due south of the existing combined school, approximately 500 ft south of the south river bank. In general, the subsurface conditions were relatively uniform at depth with some variation in near-surface conditions. The soils generally consisted of slightly plastic silts with varying amounts of fine sand and clay, interbedded and with occasional layers of slightly plastic, silty clay. From the surface to a depth ranging approximately 3 to 6 feet, numerous peaty and peaty-rich layers were observed interbedded with the fine-grained mineral soils, and occasional thin peaty seams were observed to depths of about 20 feet. Based on penetration resistance, the soils were generally soft to medium stiff (penetration resistance values generally < 10 blows/foot) to about 40 feet with a stiffer or denser zone around 20 feet. This stiffer or denser zone appears to be correlated with a darker, lower-clay-content silt and an increase in fine sand content.

Below a depth of about 40 feet, penetration resistance values increased significantly to about 20 to 30 blows/ft. This increase in penetration resistance correlated with very stiff, darker-colored silt with a lower clay content. See Appendix C for a copy of the geotechnical report for the 2001 Kotlik Replacement School which contains soils boring logs and boring locations map.

Ground conditions on the East Island are similar to conditions in the main village: dry along the river, becoming wetter and swampy farther inland.

Groundwater

Groundwater conditions at Kotlik can be summarized as follows:

- Groundwater depth fluctuates with seasons
- Highest in summer and after heavy rain
- Lowest in spring before breakup

- Observed depth, May 1999 was 17 foot
- Summer excavations fill quickly
- 8 foot excavation in 2002 filled in a few hours

In early May, 1999, ground water depths were around 17 feet. This is considered to be near the normal seasonal low level. Based on field observations, it is safe to conclude that the maximum height of ground water is near or even slightly above ground surface in many areas during peak periods.

It is anticipated that the groundwater table will fluctuate seasonally with the stages of the Yukon River. Highest groundwater levels should be anticipated after spring breakup and following periods of extensive rainfall in the drainage basin headwaters. Groundwater levels typically drop throughout the fall and winter months and reach their lowest levels just before spring breakup. At the school site, groundwater was observed at a depth of about 17 feet. We anticipate that the ground water level at the time the boring was drilled (May) was at or near the seasonal low level.

The village as a whole evidences wet surface conditions. Excavations will fill with water relatively quickly. During the summer of 2002, groundwater was measured to fill an 8 foot deep excavation in just a few hours.

Soil pore water salinity ranged from 2 to 6.5 ppt (parts per thousand). By comparison, the salinity of seawater is around 35 ppt. Salinity in the groundwater will depress its freezing point. The depression of the freezing point of the pore water by such a dilute salinity is insignificant. It will be approximately 0.00011°F from 32°F to 31.99°F. The term pore water describes water in the unsaturated zone above the water table. The unsaturated zone contains water (pore water) and air (pore air) in the pores between the soil particles.

Permafrost

Ground temperatures measured in a 60 ft. boring in May of 1999 ranged from 30.6°F to 32.3°F. The temperatures indicated that the upper 30 feet of the soil column was below 32°F. However, the soils only appeared frozen and bonded to a depth of about 9 feet. Ice lenses up to 3/8 inch thick and constituting an estimated 5 to 15 percent of the soil volume were observed in a zone from approximately 5.5 to 9 feet.

By definition, soils that remain below 32°F throughout the year are permafrost. It is possible that permafrost extends to a depth of approximately 30 feet. The freezing point of the soil pore water below a depth of approximately 10 feet may be depressed by the elevated salinity. In addition, clay size soil particle effects may further depress the freezing point so that the soils have a high unfrozen water content and appear poorly bonded. Soils within the active layer are typically bonded when frozen.

Before final design of utilities extensions to the islands, specific localized geotechnical investigations should be undertaken throughout the project area. It is considered essential that soils be sampled and tested below river bottom at the locations finally

selected for under-river utilities crossings. Test borings should be advanced, and samples obtained to depths of not less than 5 feet below the lowest planned elevation of pipes crossing under the rivers.

Based on available existing data, it is considered reasonable for planning purposes to assume that any buildings constructed as part of the utilities extensions be either 1) buildings supported on wood cribbing on a compacted gravel fill, or 2) founded on piles extending to a depth of approximately 43 feet, and that measures be taken to avoid potential pile jacking due to frost. The existing soil conditions would not support piles until a depth of approximately 43 feet. The pile size cannot be determined until the load and configuration is known. Separate field geotechnical investigations and analyses should be undertaken prior to final design to insure that foundation designs are adequate for local conditions.

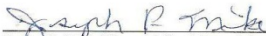
Also, based on available data, it can be assumed for planning purposes that utilidor design can be similar to existing for all areas of Kotlik.

Appendix F: 2010 Approval

VILLAGE OF KOTLIK
P.O 20210
KOTLIK, ALASKA 99620
(907)899-4326 / 4836 FAX (907)899-4790

Agreement of the 2010 Kotlik Community Development Plan

We, the Kotlik Traditional Council have reviewed the updates and changes to the community plan. All updates reflect the progress we have made in the past years on meeting our goals to improve our community. By signing this form, we approve the 2010 Kotlik Community Development Plan.



Joseph P. Mike, Tribal President

Appendix G: Contacts

Kotlik Tribal Council
P.O. Box 20210
Kotlik, AK 99620
Phone: 907-899-4836
Fax: 907-899-4790

Native Village of Bill Moore's Slough
P.O. Box 20288
Kotlik, AK 99620
Phone: 907-899-4232
Fax: 907-899-4461

Hamilton Tribal Council
P.O. Box 20096
Kotlik, AK 99620
Phone: 907-899-4252
Fax: 907-899-4202

City of Kotlik
P.O. Box 20268
Kotlik, AK 99620
Phone: 907-899-4313
Fax: 907-899-4826

Kotlik Yupik Corporation
P.O. Box 20207
Kotlik, AK 99620
Phone: 907-899-4014
Fax: 907-899-4528

Calista Corporation
301 Calista Court, Suite A
Anchorage, AK 99518
Phone: 907-279-5516
Fax: 907-272-5060

Yukon-Kuskokwim Health Corporation
P.O. Box 528
Bethel, AK 99559
Phone 907-543-6020
Fax 907-543-6006