THE NEXT HORIZON

A socio-cultural study of the impact of oil development on the Native community of Nuiqsut, Alaska

ADRIAN REDMOND & STIG THORNSOHN

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on the Native community of Nuiqsut, Alaska

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Nuiqsut hunters George Taalak and Martha Itta hunting for seals in the Beaufort Sea

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The spring thaw brings much ice and high water levbels to the Colville Delta

This study was commissioned in 2012 by ConocoPhillips Alaska Inc. as a follow up to a study from 2002[1] with the purpose of documenting the socio-cultural impact of the development and operation of the Alpine oilfield on the Native village of Nuiqsut.

These studies are also a requirement of the memorandum of understanding between Kuukpik Corporation and the operator of the Alpine field - originally ARCO Alaska, and since 2000 Phillips Petroleum, which merged with Conoco in 2002 to become ConocoPhillips Alaska Inc. concerning the use of Kuukpik lands.

Adrian Redmond and Stig Thornsohn of Channel 6 Television Denmark were engaged as independent researchers and authors of this study because the company had both extensive experience of working in Arctic villages and a long-standing relationship with the community of Nuiqsut, having produced a documentary film about the beginning of the Alpine oilfield in 2000.

[1] Socio-cultural Impacts of the Alpine Field on the Colville River Community of Nuiqsut: An Initial Assessment, Final Report, Prepared for Phillips, Inc. and the Kuukpikmiut Subsistence Oversight Panel, February 14, 2012 by Circumpolar Research Associates, Anchorage.

Stig Thornsohn and Adrian Redmond in Nuiqsut, 2013

In 2012, the company were engaged by Kuukpik Corporation to produce a new documentary film about the same subject and were also engaged by ConocoPhillips Alaska to undertake this study, as a parallel, though editorially independent project to the documentary film.

The authors were given a free and open brief to define the scope of this study and to research, write and edit this report. It is to the credit of both ConocoPhillips Alaska as the commissioning party and Kuukpik Corporation as the ultimate recipient of this report, that neither party have exerted any undue editorial influence over its form and content. It is our professional opinion that we have been given the same academic freedom afforded to comparable scientific studies undertaken on the North Slope by other independent researchers. In the same spirit, we accept full responsibility for any errors or omissions that may be found in this report.

Remote and isolated as Nuiqsut may seem at first sight, the arrival of journalists, film crews, and social scientists engaged on almost every avenue of inquiry from biology to anthropology is far from unusual for the citizens of Nuiqsut. On the contrary, the village is continually visited by outsiders who seek to gather information, scientific data and insight into a wide range of subjects related to this community and its environment. Such a level of activity throughout the year places considerable burden on the resources of the community, as we already understood from our previous work in both Nuiqsut and other Native communities in Alaska, Canada, Greenland and the lower 48 states.

It was therefore logical for us to tackle this study in tandem with the documentary film, harvesting interview testimony and research data for both projects at the same time. We originally envisaged that, besides our extensive interviews and research for the documentary film, we would undertake a community-wide survey based on a series of questions to each citizen or household, the answers to which would give us some statistical data that would be comparable to data from previous studies or data from studies in other Alaskan communities.

It should be noted that the impacts, changes and trends which we hoped to document via classic social-scientific survey approaches also have a considerable influence on the feasibility of such study methods. The dynamics of the community of Nuiqsut during our fieldwork periods in 2012, 2013 and 2015, and the relationships between the various community entities, which we saw as essential participants in any community survey, necessitated that we find other approaches to gathering data and presenting the story of Nuiqsut.

We discovered that we were not alone in this experience. Other studies, including the 2010 borough-wide census report undertaken by the North Slope Borough, met with similar obstacles in Nuiqsut when trying to secure a level of community participation that would ensure a statistically significant and representative survey. As this situation became clear we agreed with ConocoPhillips Alaska to complete this study without a community-wide survey, though with recommendations for supplementary fieldwork to be included as an addendum to this report.

This situation has forced us to explore other avenues of enquiry and research. We have also consulted relevant databases and sources in the public domain to harvest some demographic and socio-cultural data about the community so that there is some basis for objective comparison with earlier studies. It should be underlined that census and survey data from rural communities such as Nuiqsut is often based on a low sample set of the population and that, due to different survey methods, the results of different surveys or data from different years make comparison unreliable. Documenting the changes and impacts in Nuiqsut in the past decade requires more than statistics. In fact many statistics could be somewhat misleading, particularly when one considers the small data sample of less than 200 households and the poor prospects of achieving the participation of the majority of the adult population.

In the course of the preparation, fieldwork and editorial phases of our work we have consulted a wide range of previous studies relating to the Iñupiat, the North Slope Borough and Nuiqsut in particular, many of which are cited in the footnotes of this report.

The earlier (pre 1980) anthropological studies are amongst the most illuminating, despite the fact that they do not cover the events and developments since the discovery of Alpine.

It is a common theme in many of the sociocultural studies previously published by established and respected anthropologists and social scientists, that the working conditions for such studies on the North Slope in general and in Nuiqsut in particular, do not easily lend themselves to the established and proven approaches of social science. The small population of the village sets certain limitations with regard to statistical significance and reliability, limitations which are further compounded by the increased statistical uncertainty when dealing with smaller sub-samples within the community. Similarly, the lack of accurate unaggregated baseline data from previous studies also makes the interpretation of new data less certain.

One factor common to previous studies that is worth noting is the traditional unwillingness on the part of the community to participate in studies, particularly in studies based on census surveys and questionnaires. Coming to the village, as they historically have done so in connection with periods of dramatic change or development, social scientists, researchers and journalists have been traditionally seen by the Iñupiat as "agents of change", more representing the interests of outside agencies such as government or the oil industry, than being impartial and objective harvesters of data that ultimately should serve the interests of the community.

This seems to be true today, despite the fact that most studies, including this one, are undertaken because of legislative or contractual requirements intended to protect and serve the interests of the community and to help identify and quantify any impact or change which may occur in the future.

From both previous studies and our own experience it seems clear that while Iñupiat entities such as Kuukpik Corporation, the North Slope Borough, and the City of Nuiqsut might insist on studies such as this as a prerequisite for development proposals, such studies are not always popular.

Many villagers consider the questions of outsiders as impertinent, insensitive and undesirable. Most villagers, including many in leadership positions, seem reluctant to commit themselves by answering questions or providing data which they, according to our interpretation, see as something which in the future could be used against the interests of the community.

We do not question here that it is the right of the citizens of the community to determine their own attitude to this question. Given that most examples of socio-cultural change experienced by the Iñupiat in modern times have followed the arrival and activities of outsiders, it is hardly a surprising phenomena. Non-Iñupiat residents in the community, who would otherwise be good sources of information for such a study, are usually quick to recognize that village issues are something in which they should avoid involvement or opinion, even when conversing with outsiders - particularly in a formal survey or interview context.

Similarly, there is a clear power structure within Iñupiat families and village entities that influences which individuals will talk with which outsiders about which issues. The general population, though being sociable and friendly, will often avoid questions or conversations that progress beyond those subjects on which they feel comfortable to express a personal opinion. Respect for their leaders, a general humility commensurate with the Iñupiat values, and a keen sense of what is correct in the context of their own culture leads most Iñupiat to avoid some of the topics and questions which otherwise would be relevant for outsiders undertaking a scientific study or a journalistic assignment.

These considerations are independent of, and completely override any contractual briefing or professional methodology for such a study. As previous researchers have experienced and observed, we have recognized that these considerations constitute the "rules of engagement" for our work in Nuiqsut.

But in doing so, we recognize that they are not only a limitation, they are also a vital aspect of the subject under study, because they are part of and illustrate the prevailing cultural framework of the community and serve to some extent to explain many of the issues which a study such as this must examine. While respecting the right of the community and its entities to relate to studies by outsiders according to their own cultural values and traditions, it is important that we highlight the areas of study from which the community could benefit, given better cooperation, participation and openness, though leaving the ultimate choice to the community itself.

Previous socio-cultural studies undertaken since the discovery of the Alpine field have focused mainly on statistical data, with very little interpretation or narrative that can help the reader understand the dynamics of the community or the reasons for many of the situations or trends documented by this statistical data.

During the editorial phase of this report, we became aware of a study undertaken for the Minerals Management Service in 1984[2] , which, besides giving excellent baseline data about the community before the discovery of Alpine, also documents many changes, trends and impacts which, in oral testimony today, are often attributed to the more recent development of Alpine, but which were clearly evident a decade after the village was resettled and a decade prior to the discovery and subsequent development of the Alpine field. The 1984 report has confirmed and put into perspective many of the observations of the authors of this report.

The current conflicts between village entities are not new, as the aforementioned 1984 study confirms, there has been disagreement between village entities at several times since the early years as the village population began to grow beyond the original settlers and Kuukpik Corporation shareholders, although between 1995 and 2013 there did exist a general consensus on development issues which ensured some degree of harmony in the village.

[2] Technical report Number 96, Nuiqsut case Study, ETHNOGRAPHIC STUDY AND MONITORING METHODOLOGY OF CONTEMPORARY ECONOMIC GROWTH, SOCIO-CULTURAL CHANGE AND COMMUNITY DEVELOPMENT IN NUIQSUT, ALASKA, Prepared for Minerals Management Service, Alaska Outer Continental Shelf Region, Leasing and Environment office, Social and Economic Studies Unit, January 31 1984, by The Research Foundation of State University of New York, University Center at Binghamton, State University of New York (Galginaitis, Change, MacQueen, Dekin, Zipkin et al).

Recognizing that many avenues of classic social science were closed to us, we have instead chosen to focus on developing an understanding of the issues and challenges faced by the citizens of Nuiqsut, which together with an understanding of the dynamics of the community and its several entities and power structures, may give some clear indications of the extent of direct and indirect impact from Alpine as well as some constructive recommendations as to how impact issues could be addressed and by whom.

Given such an approach, our research methods are simple and somewhat unscientific in comparison to most anthropological or ethnographic studies. We have no "null-hypothesis" when addressing the question of socio-cultural impact in Nuiqsut. All previous studies, together with the empirical evidence harvested simply by visiting, living and working in the community over a long period, leaves little room for doubt that the community has been subject to many changes and impacts, the extent of which are difficult for outsiders to quantify for the aforementioned reasons. There remain the relevant questions about how much of this change and impact is due to the Alpine oilfield specifically, and to what extent can past and future impacts be mitigated.

Rather than asking citizens to provide answers to pre-determined multiple choice questions (an approach that gives data that is easy to tabulate and compare but which often forces the respondents to choose responses other than those which they would otherwise have considered appropriate) we have spent a great number of hours in dialogue with groups and individuals. Our first goal with such dialogue has been to establish the trust of those we have met, using their testimony to help us identify the issues and concerns that are relevant to the community.

Rather than attempting to harvest all our testimony and knowledge under artificial interview or survey situations, we have often chosen to meet people at their place of work or their home, or in public places such as the hotel, the community centre or the school, and experience for ourselves the everyday lives of the villagers. We have met citizens at work, in the village and at Alpine, and have spent many hours and days with local hunters during their hunting and fishing trips.

By accepting that the Iñupiat culture is essentially oral in nature, we have heard many stories, all of which tell us much more about the history and development of Nuiqsut than statistics ever can. In short, between October 2012 and July 2015 we have spent over 25 weeks living, working and spending leisure time with a wide selection of the citizens of Nuiqsut.

This process gave us a unique insight into the dynamics of the community and the many, and often conflicting, views and concerns about the village and its future; giving us the answers to some of our questions, but more importantly, helping us define and understand many of the questions that we should be asking.

A good example of this process was our research into the employment profile of the village. While there are a few primary employers, there exists no central database about how many people are employed. Each entity has its own way of tallying employees and determining whether they are full-time or part-time employees, seasonal or year-round. Without a survey of the individual citizens, which was not possible, we would have to arrive at a workable estimate. This proved not so difficult - given that almost everyone in the village knows and is related to almost everyone else, an evening's discussion with several residents gave us a reasonably accurate overview of how many jobs there are in the community. The fact that we undertook this work parallel with our filming for a documentary gave us an access to many people, places and events in the village, to which a conventional social science survey team might not have access. One learns more about how people hunt, fish or work by following them, filming them and sharing time with them, than by presenting them with a questionnaire.

As this process progressed and we developed our understanding of the subject, we undertook a series of filmed interviews with over twenty citizens that we consider to be a representative cross-section of the community, including corporate, city and tribal leaders, elders and young, hunters, public or oilfield employees, newcomers and original settlers or their offspring, Kuukpik shareholders and non-shareholders.

To some of the citizens with whom we have talked, worked and made interviews, we were newcomers; to others we were visitors whom they had known for many years. Some of those with whom we worked during our 2012/2013 visits we had met as teenagers during our first visits between 1997 and 1999.

On each of our fieldwork trips to Nuiqsut we also spent several days at Alpine, where we were given unlimited access to people and places. Our research discussions and filmed interviews at Alpine covered a wide range of CPAI field management, operations staff and contractors, including several Nuiqsut residents working at Alpine. We were able to travel the oilfield widely in different seasons, by both ice road and helicopter, including in 2015 visits to the CD-5 drill site and new roads and bridges connecting this with Alpine and Nuiqsut.

Besides giving us an understanding of the relationship between Alpine and Nuiqsut, CPAI staff shared their experience and knowledge about a wide range of operational subjects, giving us a better understanding of the challenges and human endeavors involved in the exploration for, and production of, oil in the Arctic environment.

As will become evident from this report, the residents of Nuiqsut have their concerns about the impact of the oil industry on their environment and their community, but, as we also hope will be evident, the development and operation of the Alpine oilfield has taken place, and continues to take place, on the foundation of a solid and equitable relationship between ConocoPhillips Alaska and the community of Nuiqsut, in which there exists a spirit of common goals and common achievement.

An understanding of Nuiqsut and Alpine today requires some understanding of the history of the Kuukpikmiut people, the 1971 lands claims settlement and the development that have followed since. So too is some insight into the operation of the oilfield an advantage. We have therefore written this report with both the initiated and uninitiated reader in mind, in our belief that the story of Nuiqsut and Alpine is also one of relevance to readers far outside Alaska. Those readers who are well acquainted with the history of Alaska in the 20th century may wish to begin at Chapter 4 (The founding of Nuiqsut).

It is our hope that this report can make a vital contribution to the continued mutual understanding between ConocoPhillips Alaska and the community of Nuiqsut as well as being a useful source of information to other agencies or individuals whose work demands an understanding of this unique Arctic community and the many important issues and challenges that the citizens are facing and will continue to face in the coming years.

Adrian Redmond
Stig Thornsohn

June 2016

The Nalukataq feast in June that marks the end of the whaling season for each successful crew begins with a prayer of thanksgiving

It is the goal of this assignment to document the socio-cultural impacts, positive and negative, that the development and operation of the Alpine Oilfield has had on the Native village of Nuiqsut in the decade since 2000.

In these ten years, Nuiqsut has seen many changes and while there is a broad perception - both within the village and outside - that the Alpine oilfield has made its mark on the village, it is important to underline that the changes and impacts experienced or perceived by the community are not always directly correlated to the development and activities of the oilfield, and that even where correlation can be demonstrated, it is difficult to infer that the Alpine oilfield or its operator ConocoPhillips is the direct cause of such change or impact.

The reasons for this qualification are manifold. Firstly, the development of Alpine must be seen in context with the wider history and development of the entire North Slope oilfields, and indeed the even wider history of the development of natural resources in Alaska. As a vital economic locomotive in the State of Alaska, the oil industry has long been a catalyst of change and economic growth throughout the state, the effects of which have also long been felt in rural Native communities such as Nuiqsut.

Secondly, while the development of the Alpine oilfield has obvious direct implications for the nearby village of Nuiqsut, the economy of the entire North Slope Region, including both the North Slope Borough government and the Arctic Slope Regional Corporation, on both of which the community of Nuiqsut to some degree has depended economically, is closely intertwined with the oil industry on the North Slope. Direct taxation and royalty revenues from the industry, together with the wider "trickle-down" economy of employment and contracts for Native-owned entities, has been a vital component in the economy and employment opportunities of the North Slope communities, including Nuiqsut, for many decades. Therefore many of the changes and trends in Nuiqsut, which at first sight could be attributed to the development and operation of Alpine, are in fact the result of a longer and wider development in the region.

Lastly, Alaska's rural Native communities are no longer isolated politically, economically or socially from the wider American society or indeed the global community. The gradual yet constant Americanization of rural Alaska during the 20th century, and particularly since the coming of statehood in 1959, have brought changes to Alaska's rural communities which, besides the obvious material and social benefits, have also implied socio-cultural changes and trends that run against the traditional way of life. In this respect, change and impact are nothing new to Native Alaska, and all Native Alaskans alive today have been part of this development.

During the past decade, global developments have further cemented the course of development in rural Alaska. Despite high transport costs, consumer goods and electronics, processed foods, automobiles, household appliances and modern building materials are widely available in the Arctic.

The development of communications technologies, particularly the internet and mobile phones, have brought a wide range of global cultures and ideas to rural communities, giving each generation new ideas and aspirations, and new opportunities and challenges. Increased exposure to the wider American and global culture has raised the expectations of the citizens with regard to technology, employment and economic welfare, and the need for new education, training and employment opportunities has increased more in the past decade than perhaps in the preceding fifty years. As rural communities gradually embrace modern technologies and working methods, so too is the demand for local expertise to harness and maintain such technologies increased.

Therefore many of the changes and impacts that Nuiqsut has faced in the past decade and will continue to face, are complex in nature and difficult to attribute to any single causal factor. In this respect it is perhaps less important to quantify and attribute the specific impacts and their causes than to identify how the various stakeholders in the community and the oil industry can continue to work together to mitigate the potential negative impacts and thus harness the advantages of development from which all stakeholders may ultimately benefit.

Despite the difficulties of distinguishing one cause of impact or change from another, the community of Nuiqsut is interesting from a study point of view, in that it is was initially a small homogenous community in which the citizens shared a common history, culture and lifestyle as a starting point for this study, though as we will see, as time has progressed, the changes and impacts from a variety of sources have resulted in a community that today is less homogenous than it was even ten or fifteen years ago.

As explained in our introduction above, we chose for logistical reasons to pursue a personal narrative approach rather than to conduct a classic social-scientific survey with questionnaires or interviews from the entire community. While this lack of tangible statistical data sets some limitation for our report and leaves some areas of study which in our opinion warrant being addressed by additional fieldwork, it does not totally undermine the value of the alternative approach which we have been forced to adopt. From our reading of previous studies - in Nuiqsut and elsewhere, it would seem that truly objective and dependable statistical data is hard to achieve when dealing with such a small data sample as a few hundred people in a small rural community such as Nuiqsut.

The citizens of Nuiqsut have been the subjects of many scientific studies covering almost all aspects of subsistence life, environmental issues, health and welfare, wildlife and natural resources and cultural affairs. They have experienced 40 years of public meetings and hearings about ANCSA, the foundation of the village and its corporation, their relationship to the North Slope Borough and their regional corporation, and the proposed activities of the oil industry. The fact that, through ANCSA, the village of Nuiqsut was established and achieved its own village corporation, city council and tribal government has, for four decades, meant that most of the adult population of the village has been actively involved in the various processes of democratic government and debate - probably to a degree that far exceeds the experience of rural or urban population groups in the lower 48 states or Europe.

It is our conclusion that the villagers of Nuiqsut are very experienced in expressing their concerns and experiences, as they are also, in their own way, very politically astute when evaluating the possible economic or political implications of their testimony to outsiders. Nowhere is this more evident than in the typical responses to questions about subsistence hunting and the dependence on subsistence resources.

99789 Nuiqsut, Alaska, November 2013, houses on Nigliq Street with water and power plant in background, village cemetery in foreground

Every villager seems clearly aware that their reliance on subsistence, despite the many ways in which the pursuance of the subsistence lifestyle has changed in recent years, is not only the foundation of their culture, but also the foundation of their economic claim to mitigation, compensation and income from the lands on which they hunt and of which their corporation is the de-facto custodian. Subsistence today is therefore important culturally, nutritionally and politically.

In our experience of over fifteen years study of the community, including the fieldwork for this report undertaken over the past two years, we have rarely heard any testimony from villagers that would indicate that the economic, cultural or nutritional importance of subsistence has declined, regardless of the fact that the consumption of imported processed foodstuffs has increased and that because of employment, many villagers have less time available in which to pursue subsistence activities or to pass their traditional knowledge and experience on to their children.

We conclude that the political and economic importance of subsistence today is at least as vital as its cultural and nutritional importance, and that any survey that seeks to explore changing subsistence patterns via direct questions or formal surveys will often harvest ambiguous answers. This is not only due to an awareness of the political importance of subsistence, it is also evidence of the villagers continued commitment to their culture and way of life.

When examining areas of potential concern or impact, it is also our experience that one is, to a large extent, dealing more with human perceptions than one is dealing with scientifically verifiable data. To some degree this phenomenon is due to the robust nature of the traditional culture of the Iñupiat , whereby traditional knowledge and experience is communicated orally rather than in a classic documented form. It is also a phenomenon which social scientists have noted in many studies in other rural communities, where they experience a long tradition for oral understanding of the immediate physical environment and where sudden, often unexpected changes often are attributed to outside forces, even when the causes may be closer to home.

The activities and operations of government agencies, the oil industry and other outside entities are, in many cases, based on cultural values and ideas that are still new to the rural Native community. Such organizations do not inherently share the same concepts or values of land-ownership, wildlife stewardship or subsistence lifestyle and sharing that is inherent to the Native village. This factor can often become the basis for misunderstanding or skepticism, though the more experienced industry players such as ConocoPhillips have done much to address this in their dialogue with the community.

As an essentially oral culture, the Iñupiat have little written documentation about how their previous generations lived in times past, though their extensive oral history, which is shared throughout the Arctic, clearly documents a way of life that remained essentially unchanged until the late 19th century, and which for rural communities remained intact until well after the Second World War.

It would not be inaccurate to say that of all the changes that Iñupiat and other Inuit communities have experienced in the past 10,000 years, most have occurred since about 1900, more than half has happened since 1960, and nearly all of this change has occurred in the interface between the Iñupiat population and outsiders, who have brought new tools, technologies, cultural values and political systems with them. Given this as a cultural starting point, it is hardly surprising that even today, the Iñupiat see the outsider as a force of change, and thus often as the cause of any perceived impact.

The degree to which any phenomena observed and experienced by members of the community is directly or indirectly caused by the oil industry at Alpine is often debatable. While scientists may give the industry a clean-bill-of-health on a specific issue, the perception that such an issue is the result of oil industry activity is commonplace. In fact perceptions can be so sincerely held that it becomes in the best interest of the oil industry to address the issue, regardless of whether the oil industry is in fact at fault.

The contrast between the Native subsistence culture and the industrial culture is so great that it is impossible to discuss many issues without the inherent confusion, often on both sides, that results from perception rather than fact.

While the oil industry on the North Slope has made errors, it is noteworthy that the environmental and workplace safety track record in the Colville River Unit (Alpine) is exemplary. This is not merely due to the regulatory and contractual framework with government and landowners within which ConocoPhillips and its partners must operate at Alpine, it is also characteristic of the prevailing culture of ConocoPhillips and in particular of the Alpine Oilfield, which we describe in Chapter 7.

Alpine and the ensuing economic growth in Nuiqsut have brought many important benefits to the community, as well as many new challenges.

The challenges facing Nuiqsut today are manifold and some seem almost overwhelming, yet it is our clear impression from several years work in the community, that the major changes of the past decade and the major challenges of the present and coming years are not due to direct negative impact from Alpine itself, but rather due to the ways in which economic growth and material progress have altered the way the citizens of Nuiqsut live and work with each other, as they continue to adapt their community enterprises and institutions to meet the needs of the present and the future.

Given the high degree of self-government and self-determination that ANCSA and subsequent laws made possible in Native Alaska, and the wealth of cultural and governmental organizations that have evolved since 1971, it would be a mistake to attribute most negative impact from oil resource development on the Native communities as being the fault of the oil industry. On the contrary, it is important to understand that many of the changes and much of the impact are inevitable consequences of the process of human development and empowerment for which ANCSA and its ensuing institutions was but the seed.

As the North Slope Borough and the regional and village corporations reach maturity, they too are becoming better at identifying and addressing the important socio-cultural issues, at a time when they still have the oil revenue on which to fund their development and growth.

In this respect, it would be a mistake to view the Native population as passive victims of development, because they are empowered with the political and economic institutions with which they can navigate in an ever changing world.

That, after less than half a century, the Iñupiat have not yet fully achieved this goal is hardly surprising when one considers how many decades or centuries of trial and error the great trading companies and political institutions of Europe and America took to make the same journey.

An isolated house on the Kuukpik homesite area, 2013

Geese (nigliq) over the Nechelik Channel, Nuiqsut, May 2013

Melting freshwater ice on the Nechelik Channel, Nuiqsut, June 2013

The Nechelik Channel to the west of the Colville River main channel

The Colville Delta

The Colville River is one of Alaska's, and North America's, major rivers, rising from its source on the North Slope of the De Long Mountains and stretching approximately 350 miles to the Arctic Ocean, providing a watershed for a large area of tundra on the north side of the Brooks Range, entirely above the Arctic Circle. The river is frozen for more than half the year and floods each spring, as the snow and ice from the mountains and the tundra melts into its many tributaries

From the foothills of the Brooks Range to the Arctic Ocean is some 100 miles of tundra, a flat Arctic desert where there is little precipitation. Most of each winter's considerable snow cover on the North Slope does not fall here, instead it is brought by the wind often hundreds of miles, from the frozen sea ice of the Arctic Ocean. This tundra landscape is covered by a thin "active layer" which thaws each spring and summer, with the underlying soil and gravel being permanently frozen as permafrost, which in some places can extend as deep as a thousand feet or more below the tundra.

The small and great rivers of the Arctic Slope flow above the permafrost, the spring thaw being too short a period in which the waterways can erode deep into the tundra. Instead, the melt-water burdened rivers simply overflow, their currents driving and eroding an ever-changing and meandering course through the surface landscape, fanning out to form the Colville Delta. The delta is approximately 20 x 23 x 26 miles and covers an area of approximately 5,900 square miles of tundra interspersed with large rivers, smaller channels and thousands of small lakes and water pools. As a satellite image of the region shows, more than half the land surface here is below water in the summer months.

This vast coastal plain, like much of the Arctic Slope, is an important habitat for a wide range of indigenous and migratory wildlife. The indigenous species that live here all year round include bears, foxes, wolves, wolverine and some predatory wildfowl; all of which are either able to hibernate or to survive as predators and scavengers during the dark winter months.

There are also many species that are indigenous to the Northern Alaska, but which migrate between regions during the course of the year, the most notable being the caribou and the moose. During the spring and summer, the North Slope provides mating and breeding grounds for many migratory wildfowl, including geese, ducks, swans and loon, some of which migrate thousands of miles each year from their winter grounds in the south of the United States. The rivers are also rich in aquatic life, the annual migration of which is often related to the relative salinity, temperature, oxygen content and clarity of the waters. In the winter, the rivers are frozen, in the summer, the rush of melt water gives a freshwater environment becoming gradually more clear and more brackish as the melt waters subside and the tidal waters of the Beaufort sea penetrate further up the delta. Near the coast and sometimes quite far inland, marine mammals such as bearded seal are common, and marine predators such as polar bear are often seen inland, particularly in recent years as climate change has affected the sea ice patterns. Each year, the bowhead whale migrates from the Bering Sea to the breeding grounds of the Beaufort Sea, coming quite close to the waters north east of the Colville delta each fall, as they make their way south again.

For the Colville Delta, the seasons stand in sharp contrast to each other. What may appear to be a frozen and almost uninhabited monochrome Arctic desert in the winter, becomes a lush and vibrant habitat in the spring and summer, as the wildlife converges on this rich haven in which to nest and breed and to rear their young and to garner nutrition for the months ahead. Here above the Arctic Circle there are no trees - though the tundra is covered by willow bushes that can reach several feet in height. The flora of the tundra otherwise is similar to the Alpine environment, in which the long dark winter and short cool summer cannot support the growth of large plants or trees. Instead, the tundra is a rich garden in miniature, apparently grey and brown when seen at a distance, but in close up, the mosses, lichens and other flora exhibit rich color and variety. It is essentially a world in a delicate balance, in which each and every species has a vital place and function in the food chain, and is thus interdependent with every other plant or living creature. The Colville Delta, like most of the Arctic Slope, is an ecologically important area, on which thousands of creatures are dependent.

Traditional use and occupancy

The Iñupiat Eskimos have inhabited the coastal regions and tundra of North Western Alaska and the Arctic Slope for thousands of years, living as nomadic hunters and gatherers and gradually, over many generations, populating the entire Arctic coastline from Chukotka in Eastern Siberia, across Northern Alaska and Canada and finally Greenland.

Knud Rasmussen during his Fifth Thule Expedition 1921-1924

It was the Danish-Greenlandic polar explorer Knud Rasmussen, who on his Fifth Thule Expedition (1921-1924) was the first European to cross the Northwest passage by dog sled. His seven man team visited Inuit settlements throughout Canada, Alaska and Chukotka. (Although his application for a visa to Chukotka, then part of Soviet Russia, was denied, but not before he had visited the Inuit there.) Rasmussen collected artifacts, ethnographic and cultural documentation and oral testimony that demonstrated the common ethnic heritage of the Inuit. Subsequent studies, including DNA profiling, have confirmed Rasmussen's groundbreaking research, acknowledging the Inuit as the aboriginal population of the Arctic.

Inuit migration and settlement in the Arctic took place over many generations, as Inuit families lived their nomadic lifestyle, pursuing the wildlife and the available natural resources in the different seasons. With few exceptions (including notably the Alaskan Iñupiat communities of Atqasuk and Anaktuvuk Pass) the Iñupiat remained in coastal areas, living by hunting marine mammals and wildlife, and hunting and gathering on the tundra, usually via the rivers. For thousands of years, there were no permanent settlements. The Iñupiat lived and hunted as extended families, in smaller or lager groups depending on the location and season. By this nomadic lifestyle, the tradition of communal sharing of effort and harvest that would prevail until today was established.

One reason that neither the Iñupiat, nor the other Inuit population groups, did not become larger in number is the harsh conditions under which they lived. Though rich in natural resources in the short summer months, the Arctic is not rich in nutrition all year, and survival, particularly in the days before modern hunting methods and motorized transport, was always a haphazard affair, in which the climate and the uncertainties of the natural environment often left people to survive with few nutritional resources - or simply to starve.

Hunting wild animals and marine mammals with primitive weapons was hazardous (and can still be so), and the life expectancy of the Iñupiat was less than 50 years. Like the other living creatures at the top of the food chain, human beings in the Arctic require huge areas of land from which to wreak their survival. That the Iñupiat survived until modern times is testimony to their endurance and ingenuity, their understanding of the natural world and their ability to share their harvest and take care of each other. The Iñupiat cultural values were not founded on any political ideology or abstract philosophy, instead they are the result of necessity, dictated by the necessities of the environment in which they have lived for thousands of years.

Although the Inuit migrations over many generations came to cover thousands of miles, each generation generally lived and hunted in its own region, migrating further only when the lands were unable to support them, as families grew in number or as the wildlife migrations or environmental conditions dictated. In this way, certain population groups became connected to specific regions, developing their own traditions and dialects.

There is archaeological, as well as oral and anecdotal evidence that the Colville River Delta has been inhabited by the Iñupiat since time immemorial. There are hunting and fishing camps in the delta region the seasonal use of which, often by specific families, is sufficiently documented to justify the identification of this indigenous population as the *Kuukpikmiut* - the People of the Colville River Delta.

Until the late 19th century, the Iñupiat maintained their nomadic lifestyle. Their culture had no concept of land ownership - according to their belief, man belonged to the land, not the land to man. There were also other indigenous population groups in Alaska, but due to the vast land areas, often separated by inhospitable mountain ranges, and the small numbers of each population group, contact between the Iñupiat and others was limited; though accounts of such contact, particularly with the Athabascan Indians to the west and south of the Arctic Slope survives today in Iñupiat and Athabascan folklore and stories. Alaska was the Great Land - so great that few if any of its aboriginal inhabitants knew its boundaries or what lay beyond.

Kuukpikmiut family, 1895

Nuiqsut hunters Vernon Long and Isiah Nukapigak hunting geese, June 2013

Subsistence

Today the lifestyle of the Iñupiat is described as *subsistence*, *subsistence hunting* or the *subsistence way-of-life*. Although all humans, at some time in history, have lived by subsistence, the term itself was first coined in the 1800's to define that way of life that lay outside the western agricultural, maritime or industrial economies. In this respect, subsistence was a term with negative undertones, implying a means of survival at almost poverty or starvation level. While this was certainly a valid yet ethnocentric label when applied by anthropologists or economists to the way of life of indigenous people they barely understood, it is important to understand that, for aboriginal cultures such as the Iñupiat, subsistence has a much richer and deeper meaning, even when applied in a modern context.

Subsistence means living off the land and respecting the laws and forces of nature. Subsistence implies the need to understand and know the land, its climate, environment and wildlife, and to respect and honor these in the way one hunts, gathers, harvests and exploits natures wealth. Subsistence is a set of cultural and spiritual traditions, values and skills essential for the survival and well-being of both the individual and the community.

The concept of sharing is the cornerstone of the subsistence way of life. Some efforts and harvests must be shared, simply because one or two men cannot pursue, kill, butcher and transport the harvest on their own - the hunting of whales and large animals is a prime example of this.

Similarly, the harvest of large mammals results in a quantity of food that can rarely be consumed by one person or family alone; if it is not shared with others, much of it will go to waste. Lastly, sharing is essential in a community, because there will always be individuals who because of age, health or family circumstances are unable to hunt for themselves.

The passing on of the values and skills of sharing and the subsistence way of life was not only a question of cultural pride, it was also necessary to teach the younger generation the hunters skills and values to ensure that there would be someone to provide for the older generation. Subsistence defines and reaffirms the cultural values of the Iñupiat.

Like all aboriginal peoples, the Iñupiat have always been proud of their subsistence traditions and culture.

Whale meat - maktak - being prepared for a Nalukataq feast in Nuiqsut, June 2013

The Iñupiat culture

To interpret and understand the culture and dynamics of a Native community such as Nuiqsut today, it is important to understand the Iñupiat culture, as it had developed before the arrival of outsiders.

Despite the introduction of Christianity, the cash economy, modern tools and conveniences and the American way of life, the traditional culture, with its values, traditions and behavioral norms, continues to define both the way and the tempo of life on the North Slope and the world view of the Iñupiat.

It may be seen as a measure of the cultural resilience of the Iñupiat, that their traditional way of doing things and organizing themselves has in many aspects of their lives prevailed over the ways and means of the American society of which they have become a part.

The Inuit / Iñupiat culture has been well documented in the 20th century with the writings of Knud Rasmussen[3] and Charles D. Brower[4] being the most seminal works on the subject.

Academic studies such as Murdoch (1892), Spencer (1969), Burch (1975,1980,1981), Hoffman, Libbey and Spearman (1978), Kleinfeld, Kruse and Travis (1981) and the aforementioned study by Galginaitis, Change, MacQueen, Dekin, Zipkin et al (1984) all give valuable insights into the subject, the salient factors of which are only summarized here.

[3] Knud Rasmussen. *Den Store Slædrejse (The Great Sled Expedition)* first published 1932 in Danish, and Rasmussen, Knud (1946–52). ***The Fifth Thule Expedition,*** 10 volumes. Published posthumously by fellow expeditioners.

[4] Charles D. Brower. *Fifty Years Below Zero* first published 1942 by Dodd, Mead & Company, later republished 1994 by The University of Alaska Press ISBN 0-912006-68-4

The Nuiqsut Dancers perform at a village potluck, Nuiqsut November 2013

Kinship ties

By tradition, kinship ties were (and remain) the most enduring bond between fellow Iñupiat. Before the contact with outsiders, this situation was quite natural, given the isolation of small communities and the relative infrequency of their contact with others.

Kinship comprises both *cosanguineal* ties (related by blood) and *affinal* ties (related by marriage). Traditionally, of the two, the cosanguineal tie was the stronger.

Within the wider tradition of sharing the subsistence harvest, kinship ties also defined loyalties and responsibilities by which the active hunters would provide for their extended family and assume responsibility for passing their hunting skills and traditional knowledge on to the children, establishing further relationships and loyalties that would endure into adulthood and define much of the teamwork of subsistence activities.

Traditional household roles

In traditional Iñupiat society the distinction between the roles of men and women was defined clearly through the institution of marriage and the structure and functioning of the domestic household unit. The differences in male and female roles is a vital aspect of the division of labor in the traditional hunting economy. The complementarity of roles between the sexes is clear: men are hunters of sea mammals, caribou, and other game while women are providers of small game, responsible for retrieval of game, butchering and processing meat, and the domestic chores of cooking, housekeeping, and child care. Marriage is viewed as an economic necessity, unmarked by actual ceremony or associated taboos, and without change in social position as much as change in economic role and position of husband and wife. (Galginaitis et al, 1984:218-219)

While the men were responsible for most of the hunting, the women were responsible for processing and storing the food, typically in an ice-cellar.

With the exception of whaling, the sharing of the harvest of which is subject to strict traditions, a man was free to dispose of the harvest as he saw fit, though once stored in the ice cellar, the food came under the jurisdiction of his wife or mother, who was responsible for meeting the nutritional needs of the household and for sharing with others.

The traditional culture of the Iñupiat emphasized the equality of status among adult male hunters. The potential for individuals to amass wealth, power or prestige was largely capped by the limitations of the natural environment (the scarcity of resources) and the nature of the Iñupiat system of sharing.

Sharing as saving

Whereas in the modern cash-economy, the concept of saving money today to provide for future needs is fundamental to the Western way of life, the idea of saving was quite different in traditional Iñupiat society before the arrival of the cash-economy. While subsistence skills play an important role in the success of the individual hunter, he is also subject to the whims of nature, the variable migration patterns of the wildlife and the unpredictability of the climate, all of which could leave him, and his immediate family, without a adequate food supply. The system of sharing the subsistence harvest is a method by which each hunter pays his social debts and amasses social credit - not only in terms of the gratitude and respect of his community, but also in terms of the willingness of others to reciprocate when he most needs it. In this respect, for the Iñupiat, sharing was not an alternative to saving - it was the embodiment of saving, and the tradition of sharing and redistribution of nature's wealth remains an important Iñupiat value today.

Subsistence cultures are accustomed to the changing fortunes of the seasons, periods of abundance, often followed by periods of scarcity. The stock laid down in the ice-cellar, combined with the harvest of others who might have been hunting for different animals or in different places with greater success, made it possible to survive the alternating periods of boom and bust. This subsistence tradition has also influenced how the Iñupiat, in modern times, have adapted to a cash-economy in which periods of economic abundance from seasonal employment or corporate dividends alternate with periods of less available wealth.

Leadership and sharing

While it is certainly true that, as in many other cultures, a forceful and dominant person might have been able to promote himself as a leader, the subsistence lifestyle of the Iñupiat set certain limitations on the ability of an individual to rise to a leadership position solely on the basis of force of personality. For a man to become a leader of his fellow hunters, he must have demonstrated those qualities that define a good leader according to the Iñupiat system of values. Firstly, he must be an accomplished hunter, who through the years had proved his ability to harvest subsistence resources and to provide for his family. No hunter would have been willing to be led by a leader who was not considered a good hunter. The term "good hunter" implied more than just being a successful harvester of wildlife, it also implied showing respect for the animals, for the land, and to the Iñupiat value system. Central to this was the concept of sharing, for only by sharing could the good hunter demonstrate his willingness to share his wealth and remain equal to his fellow hunters. Thus, the way to a position of power and respect lay in the respect for, and maintenance of, Iñupiat traditions. Such a position, once attained, required the continued respect and acceptance of the community, if it were to be maintained.

While leadership manifested itself throughout Iñupiat society, nowhere was it more evident and structured than in the whale hunt. The Iñupiat have hunted the bowhead whale since time immemorial, relying each spring on the "open lead", the narrow passages of open water in the sea ice off the coast, that are created by the shifting winds and tides in the Beaufort and Chukchi seas. Even today, whaling is a hazardous endeavor, but in the days before contact with outsiders, before the Iñupiat had the benefit of modern explosive harpoons, firearms and navigational aids, whaling was a difficult affair, one that demanded much preparation and a lot of time.

Whaling crews would be formed along kinship lines, with the *umialik*, the whaling captain, as their leader. The position of *umialik* was not won easily. As a hunting endeavor requiring the investment of considerable time and effort, often under severe weather conditions, few Iñupiat would place their trust in a leader who had not previously proved himself as a good hunter with leadership qualities.

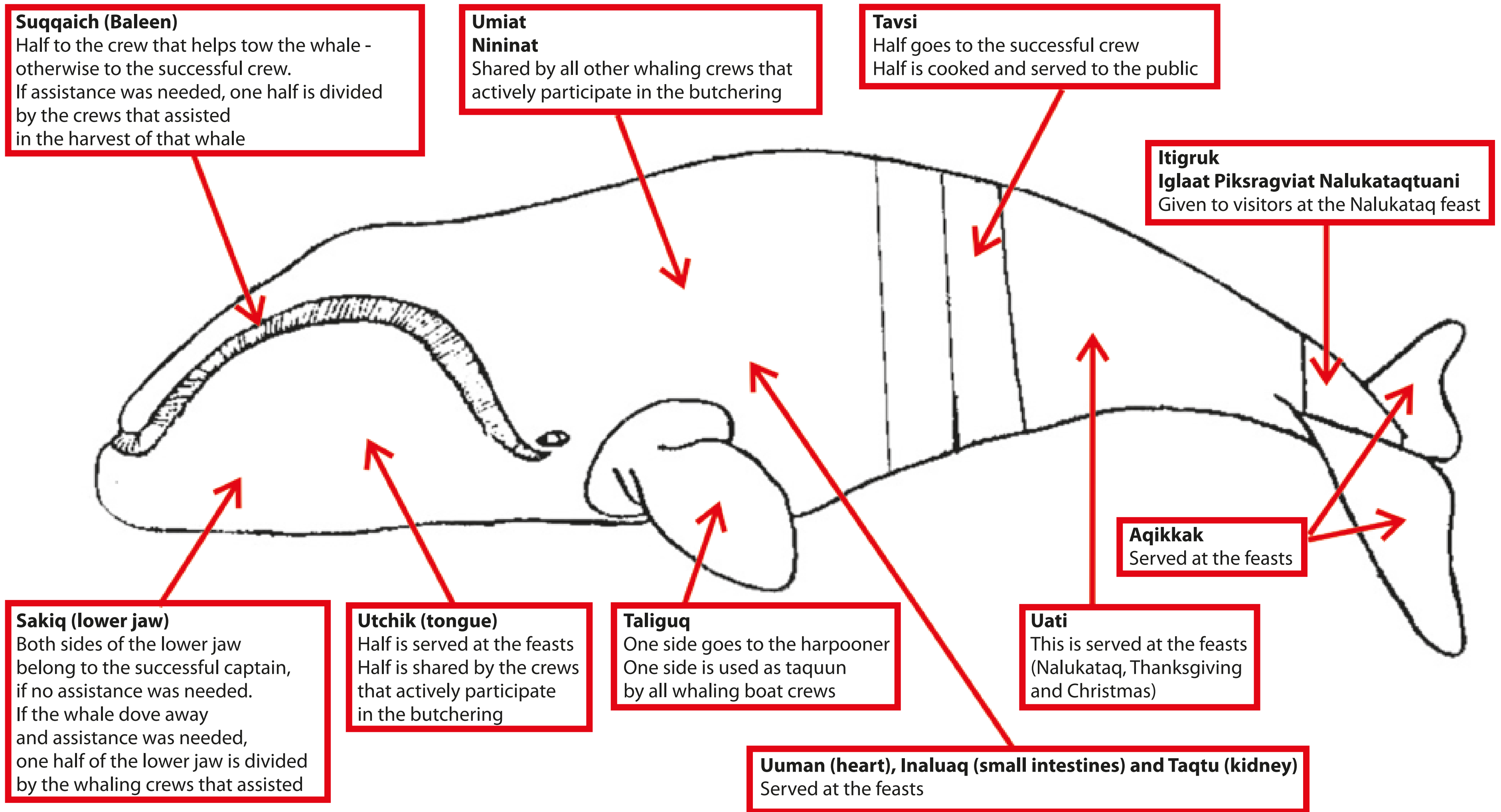
Before becoming an *umialik*, he would have served his apprenticeship with his elders, first as a *boyar* - a young boy whose task it was to make food for the whaling crew, later learning to assist in the arduous task of breaking a trail through the shore-fast sea ice to the season's whaling camp, building and maintaining the skin-covered whaling boat, the umiaq, and, in early manhood, becoming a member of the boat crew. The patronage of a father or uncle who was an *umialik* would be an advantage, but his emergence as a whaling-captain, either succeeding his elder or starting his own whaling crew, would depend on his reputation in the family and the community.

The *umialik*, once accepted by the community, became a powerful leader in the community, and was able to amass that wealth necessary to support his activities and responsibilities as a whaling captain. It was (and remains) the captain's responsibility to provide the skin-boat, weapons and tents for his crew, as well as the provisions necessary to sustain them during their month or two on the ice. It was therefore acceptable to the community that the *umialik* demonstrated some degree of entrepreneurship to enable him to fulfill his obligations, but always on the condition that he did so by ensuring an adequate stock of whale meat, blubber and other food for the entire community throughout the year.

The sharing of the whale takes place according to very specific traditions, with certain parts of the whale reserved for certain purposes and occasions - the day after a whale is landed, some meat and blubber is taken home to the village, where the whaling captain's wife hosts a feast at their home so that the whole community can celebrate the harvest.

Some parts of the whale are reserved for the crew members (although a new crew, landing their first whale, gets none of the meat; sharing it instead with the community). Some parts of the whale are transferred to the ice cellar, to be shared with the community later in the year on specific festive occasions. The power and social standing of the *umialik*, and indeed his family and the entire crew, rests on his respect of and adherence to these traditions.

A Bowhead Whale diagram
identifying portions for distribution
according to tradition in Barrow, Alaska



Pilaniaq
When the butchering for all uses is done the captain gives the go-ahead for anyone to cut and take from the portions left for that purpose

Source = North Slope Borough, Department of Wildlife, 1999

A bowhead whale diagram showing how whalers in Barrow, Alaska traditionally define the parts of the whale for distribution

Because leaders cannot exist without followers, the concept of leadership in Iñupiat communities is closely related to the idea of "followship". For the leader who wins the respect and acceptance of his family and his community, there may be little dissent or opposition, because, in accordance with the Iñupiat value of avoidance of conflict, the general consensus of the followers will be to support and follow their leaders.

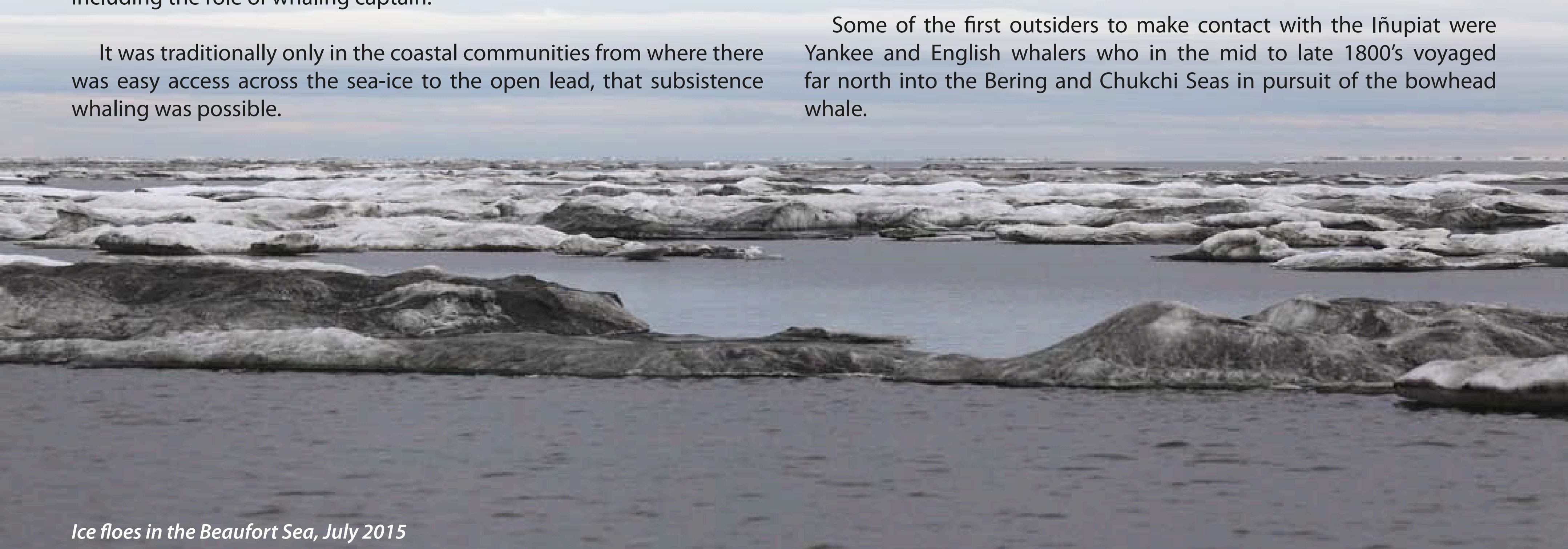
The role of leaders in Iñupiat society is closely related to the role of the elders. Traditionally the elders were those who not only were the oldest per se, but also those who had, through a long lifetime, acquired the knowledge and skills necessary for survival in the Arctic. Until less than a hundred years ago, when the typical life expectancy of Iñupiat males was under 50 years, elders and leaders were often the same. The greater life expectancy today means that the elders are considerably older than their forebears, giving space in the community for leaders with the necessary traditional and modern skills to fulfill the role of leadership, including the role of whaling captain.

It was traditionally only in the coastal communities from where there was easy access across the sea-ice to the open lead, that subsistence whaling was possible.

Inland communities such as Atqasuk and Anaktuvuk Pass can therefore not field a whaling crew, although in modern times some people from these communities join a coastal whaling crew to which they may have a family relationship. Some coastal communities that lay close enough to the fall migration route of the bowhead whale, also hunt in the fall, but with no sea ice from which to operate, fall-whaling in the often stormy coastal waters can be considerably more dangerous and uncertain.

As we will explain in the next chapter, most of the Iñupiat who resettled Nuiqsut in 1973 had grown up or spent many years in Barrow, where there is a long established tradition for both spring and fall whaling, and where, as the seat of Iñupiat government on the North Slope since the early seventies, whaling has a particularly prominent cultural role for all Iñupiat. While Nuiqsut itself is too far from the ocean and the open leads of the spring, it is possible to hunt the whale from coastal islands within reach of the Colville Delta, and it is here that the villagers of Nuiqsut have maintained their annual fall whale hunt since the resettlement.

Some of the first outsiders to make contact with the Iñupiat were Yankee and English whalers who in the mid to late 1800's voyaged far north into the Bering and Chukchi Seas in pursuit of the bowhead whale.



Ice floes in the Beaufort Sea, July 2015

Some of them became icebound and were forced to spend the winter in the Arctic, sometimes moving onto land and making contact with the Iñupiat. Many Iñupiat worked as guides and deckhands for the commercial whalers, and though their western industrial culture and cash-economy was foreign to the Iñupiat, they quickly embraced those aspects of the commercial whaling that could enhance their own whale hunt, in particular the superior harpoons and firearms.

The Iñupiat could also identify with the culture of the commercial whalers - they too were a band of men working together under hazardous conditions, for a share of the harvest and under the leadership of a powerful captain whose task it was to provide for his crew. Within a few generations, the Iñupiat concept of a whaling crew came to resemble that of their Yankee visitors, although the Iñupiat retained their deep spirituality with regard to the whale and its harvest.

In most communities, the *umialik* was never omnipotent, because of the inherent competition between different whaling crews, and thus different families and different whaling captains. The rituals of sharing and redistribution served to underline the competition between the captains, who were only able to reaffirm their position through successful harvests and the observance of tradition.

With each generation, new leaders would gradually emerge to take over the role of *umialik* in their family crew, or as families grew, to establish their own crew, thus perpetuating the tradition of egalitarian leadership and competition in a way that ensured some degree of dynamic equilibrium and stability of overall social organization. (Galginaitis et al, 1984:233)

Iñupiat communities have had many sorts of leaders and, since the introduction of Christianity, education, U.S. citizenship, Alaska Statehood and modern industries, they have embraced many new forms of leadership. Yet it is the authors' overriding impression that it is the ideas and values of leadership as embodied in the *umialik* of the subsistence whaling culture that continue to form the ideal of leadership to which most Iñupiat leaders aspire in all other fields of life today.

NUIQSUT VOICES

ISAAC NUKAPIGAK
Original 1973 settler
President of Kuukpik Corporation
Whaling Captain

"Nuiqsut has always been a whaling community - it's our heart . Whaling is part of the heart of Nuiqsut. We love to share the harvest, it's part of the learning life cycle we grew up with. I am a provider because my parents and my brother were whaling captains - they were providers for the community. This is the way we pass our wisdom and traditions on to our children, so that they too become whalers.

Yes, whaling has always had a high value for the community"

Iñupiat values

As an essentially oral culture, the Iñupiat have no written cultural records from the years prior to contact with outsiders, because they had no written language. But the lack of documentary evidence does not imply that the Iñupiat of bygone years had no social or cultural norms. On the contrary, one may suppose that the Iñupiat, because of their oral culture, had a greater tradition for passing their values and perceptions from each generation to the next, resulting in a society that retained its values intact over many centuries.

Despite the arrival of missionaries and other literate settlers in the nineteenth century, there is little early documentary evidence of a codified value system, perhaps because the missionaries, while giving the Inuit a written alphabet with which they could communicate their religious teachings, were more interested in promoting the bible than reinforcing Inuit culture. This was certainly the case throughout the Arctic.

However, the traditional ideas and values of the Iñupiat survived the colonization and Christianization of the nineteenth and twentieth centuries, perhaps because their traditional values are so inextricably related to the subsistence way of life of a culture that had remained somewhat isolated.

It was not until the 1970's, by which time rural communities in Native Alaska were experiencing extreme social and cultural stress from economic development, that Native leaders took the initiative to put their cultural values into a concrete written form. This process was adopted by many Alaskan Natives in different regions, as they looked for ways to reinforce and reaffirm their cultural heritage.

In consultation with the elders, the Iñupiat of the North Slope, and the Iñupiat of the North West Arctic Region agreed on a list of fifteen Iñupiat values.[5]

- **Knowledge of Language**
- **Sharing**
- **Respect for Elders**
- **Love for Children**
- **Hard Work**
- **Knowledge of Family Tree**
- **Avoidance of Conflict**
- **Respect for Nature**
- **Spirituality**
- **Humor**
- **Family Roles**
- **Hunter Success**
- **Domestic Skills**
- **Humility**
- **Responsibility to the Tribe**

As traditional values they are also robust in terms of the historical development of Iñupiat society over the past 150 years, in that they are not incompatible with Christianity nor with the values of modern America and the industrial workplace.

How these values have been manifested over the years and how they influence Iñupiat society today will be dealt with in subsequent chapters.

[5] Christensen, J (Ed). Inupiat Ilitqusiat: Yesterday, Today and Tomorrow, Kotzebue, Alaska, Maniilaq (1982)

Contact with outsiders

The first outsiders to come to Alaska were Russian explorers and fur traders who arrived in the late 17th century, formally colonizing the south of Alaska and the Aleutian islands in the 18th century. It is unlikely that any of these settlers had contact with the Iñupiat. With the arrival in the late 1800's of white outsiders all this changed. First Yankee and British whalers and walrus hunters, later missionaries, merchants and gold prospectors came to Alaska and made contact with the Native population. In 1867 the United States bought Alaska from Russia for 7.2 million dollars, whereby the gradual erosion of the traditional Native concept of land use would become challenged by the American concept of land ownership.

The Treaty of Cession between Russia and the US barely addressed the rights and status of Alaska's Native people. It simply stated that *"The uncivilized tribes will be subject to such laws and regulations as the United States may, from time to time, adopt in regard to aboriginal tribes in that country."* This laid the foundation for a conflict of interests that would not be addressed until 1971 - and that, some would say, remains unresolved to this day.

Given the harsh living conditions in Alaska, the Iñupiat were quick to adopt and embrace many of the modern conveniences to which they were introduced by the newcomers. Gunpowder and weapons, navigational aids, commodities such as coffee, tea and sugar, matches for lighting fires, cotton and woolen clothes, ironmongery, tools and medicine; also alcohol and tobacco. Adept at surviving, navigating and hunting in the Arctic, many Iñupiat quickly found work as guides and helpers for the white whalers and hunters, bartering their services and harvests for imported commodities.

The acceptance by the Iñupiat of firearms changed their society irrevocably, in that the need for ammunition to maintain what was a more efficient way of hunting forced the Iñupiat to integrate, at least partially, into the cash economy. By the start of the twentieth century, the Iñupiat hunted not only for their subsistence needs, but also for furs which they could barter for cash or provisions such as ammunition and steel traps.

For a period, the market for furs and the growing number of trading posts, many operated by outsiders, led to a further dispersal of the Iñupiat away from an essentially nomadic life towards the communities, such as Barrow, where trading posts were located. In this period there were also a few Iñupiat who lived by herding caribou, including at least one family who lived and herded in the Colville Delta. After the decline in commercial whaling in the early 1900's, trapping for fur-bearing animals continued to be important until the 1930's, when world fur prices declined and most of the trading posts closed. By this time, firearms and ammunition had become essential to the Iñupiat for subsistence hunting.

With the gradual American colonization and settlement of Alaska around the turn of the century came missionaries and teachers, who sought to 'Christianize and civilize the primitive peoples of the Arctic'. In fact the US government, lacking the necessary resources to establish an administration in the new territory, encouraged different churches and religious movements to establish missions in rural Alaska, granting "franchises" to specific churches for specific regions. To this day, the affinity of many a local population to specific churches mirrors the original allocation of these missionary powers, one community might be predominantly Baptists, while another might be predominantly Presbyterians or Quakers. Besides promoting Christianity, the churches established schools and clinics.

Sunday school at Presbyterian Church, Barrow, early 20th century

A combination of the white settlers' desire to convert and cure, and the Natives' interest in material benefits, gradually led to the creation of permanent settlements to which the Iñupiat were encouraged and required to settle. By the early 20th century most Iñupiat, at least officially, were residents of permanent villages, of which there were seven in what is now the North Slope Region, the largest being Barrow. Though living in villages and gradually becoming part of the cash-economy, most Iñupiat continued to live by subsistence hunting, and the Kuukpikmiut, most of whom had relocated to Barrow, continued on a seasonal basis to travel to their ancestral hunting grounds in the Colville Delta, maintaining hunting and fishing camps that their ancestors had used for centuries. Their parents had taught them to understand the landscape and find the animals, and they passed this traditional knowledge on to their children.

That the Kuukpikmiut maintained their traditional use and occupancy of the Colville Delta throughout the 20th century would prove to be of vital importance in the nineteen-sixties and early seventies, when the question of land ownership in Native Alaska would become an issue of national importance.

Nuiqsut hunter Bernice Kaigelak spotting for caribou, June 2013

The fight for the land

Following the purchase of Alaska from Russia in 1867, the United States managed Alaska as a territory, with a keen eye to the potential of the Great Land for settlement by white outsiders. With the discovery of gold in the Yukon region of Canada and Alaska to the West in 1896 and on the beaches of Nome in Western Alaska in 1898, over 100,000 prospectors came to Alaska in the hope of becoming rich.

Few made their fortunes, but many settled in Alaska, not least because settlers in the new territory could stake their claim to land to which they received title free of charge, providing that they cultivated or developed the property. Under the territorial laws, there was little recognition or protection of aboriginal land rights, nor were Alaska's Natives allowed to become land owners.

It was not until the passing of the Citizenship Act in 1924, that America's indigenous people were given US citizenship - a right extended first to the Indians of the lower 48 states, though not to Alaskan Indian, Aleut or Eskimo Natives until the passing of the Indian Reorganization Act in 1934. Even with citizenship rights for Natives on the statute books, Alaska's Natives continued to be discriminated against for many years. As late as the years following the Second World War, there were still businesses and public premises in Alaska that were openly barred to the Native population.

Because of the geographic separation between the white settlers, who lived predominantly in the south of Alaska, and the Natives of the rural regions; their coexistence was less troublesome than in other parts of the United States. The missionaries and territorial administration saw it as their task to bring civilization and modernity to the Natives, and because of a trust responsibility held by Congress since the purchase of Alaska, the United States introduced health care and educational programs throughout rural Alaska.

One aspect of this, which would have important consequences in the sixties, was that Native teenagers were sent out of their village by the government to attend boarding schools in other parts of the United States, that were operated by the federal Bureau of Indian Affairs.

Nome, Alaska, June 1903 at the height of the gold rush

By the end of the Second World War, Alaska's white population had grown with continued settlement from other parts of the United States, though Alaska continued to be governed as a territory, without any democratic representation in Washington D.C. Pressure from the white settlers in Alaska for representation in Congress, together with the international trend during the post war years for the old colonial powers to legitimize their relationships with their colonies, dominions and territories, led to the passing in 1959 of the Alaska Statehood Act, whereby Alaska became the 49th State of the Union. By the time Alaska achieved statehood, the population was 72.2% White (Caucasian), 3% Black and 18.8% American Indian and Alaska Native.

Until this time the lands of Alaska were, according to US law, mostly owned by the Federal Government. Under the Statehood Act, the newly formed State of Alaska was entitled to select 103,350,000 acres of land for state ownership, to provide an economic land base on which to fund the development of the state government and its communities.

Besides selecting lands surrounding existing urban communities in preparation for urban expansion, the state was quick to identify lands which were known or surmised to be rich in mineral wealth. The Iñupiat had known about oil for centuries, harvesting the oil-saturated peat from the tundra and using it for heat and light. The first outsiders to reach the Arctic Slope in 1836 had confirmed the presence of natural oil seepages on the tundra.

Geologists from the oil and mining industries and the Federal Government had long supposed Alaska to be rich in oil and mineral wealth. Whereas mineral extraction had already proved to be economically and technically viable in many locations, the quest for oil was tempered by recognition of the enormous logistical endeavors involved in exploration, production and transport to market. Even so, potentially oil-rich lands had been set aside as "petroleum reserves" - first in 1923 by the US Navy, which in the years following the First World War in which America had become a global maritime power, recognized the need for considerable oil reserves to allow the US Navy to move from coal to bunker-oil to fuel its ships.

Naval Petroleum Reserves were established in several US locations, including the Arctic Slope region between Barrow and what is now Nuiqsut, where 23,000,000 acres were set aside and designated as Naval Petroleum Reserve 4, (NPR-4 was renamed in 1976 as the National Petroleum Reserve, Alaska - NPR-A).

Although the federal government and the US Navy had drilled exploratory wells in NPR-4, their intention at the time was only to delineate the oilfield and arrive at estimates for reserves which could form the basis for future commercial oil exploration leases. With the geological optimism from exploration in NPR-4, to which the State was not entitled to select lands because NPR-4 was already owned by the Federal Government, the State turned its eye to the tundra to the east of NPR-4, to a region around the Sagavanirktok River which flows northwards from the Brooks Range to the Beaufort Sea at a place called Prudhoe Bay.

NPR-A near Nuiqsut and Alpine, June 2013

In 1965 the State of Alaska held lease sales to allow the oil industry to explore the region. Alaska's Natives had long been concerned about the accelerating erosion of their ancestral land rights, and they saw the 1965 lease sale as a direct provocation. Until then, Alaska's different Native groups were both geographically and politically isolated from each other, but the post-war generation of Native teenagers, who were sent away from their communities to attend BIA boarding schools as far away a Oregon and Tennessee, became exposed to many other Native American youth as well as the wider youth-culture revolution of the sixties in America.

Enlightened and inspired by the insights gained at the BIA boarding schools, some young Native Alaskans realized that it fell to their generation to lead the fight for their land rights, failing which, millions of acres of their ancestral lands would likely be lost forever.

One young Iñupiat Native, Willie Hensley, who came from Kotzebue, left the BIA school system and went on to university, where he wrote a thesis about Native lands rights in Alaska, documenting that when selling Alaska to the US in 1867, Russia had never, in terms of international law, actually gained the sovereignty necessary to do so. To put it in popular terms, Russia had sold "stolen" land to the US. But, as Hensley also documented, the US in their treaty of cession with Russia had accepted a "trust responsibility in perpetuity" for the aboriginal population of Alaska. In his thesis, entitled "What Rights to Land Have the Alaska Natives?" (1966)[6] Hensley argued that this trust responsibility implied that the US must honor and respect the aboriginal lands rights of Native Alaska.

Other Alaskan Native leaders had already opened the debate. In 1961, a new regional Native movement in Barrow, The Iñupiat Paitot (The People's Heritage), convened to discuss the protection of Native lands rights. In 1962, Howard Rock, a Native of Point Hope, had established the Tundra Times newspaper to awaken the Native population to the question of Native lands rights.

[6] What Rights to Land Have the Alaska Natives?: The Primary Question" - May, 1966 by William L. Hensley with May 2001 Introduction

Eskimo
Indian
Aleut

Tundra Times

15¢

Monday, April 1, 1963

Fairbanks, Alaska

PROJECT CHARIOT STILL ON

Three Killed In Plane Crash Near Bethel

AEC Reduces Project Area, Still Plans Nuclear Blast

State Awaits BLM Decision Before Suing in Dispute

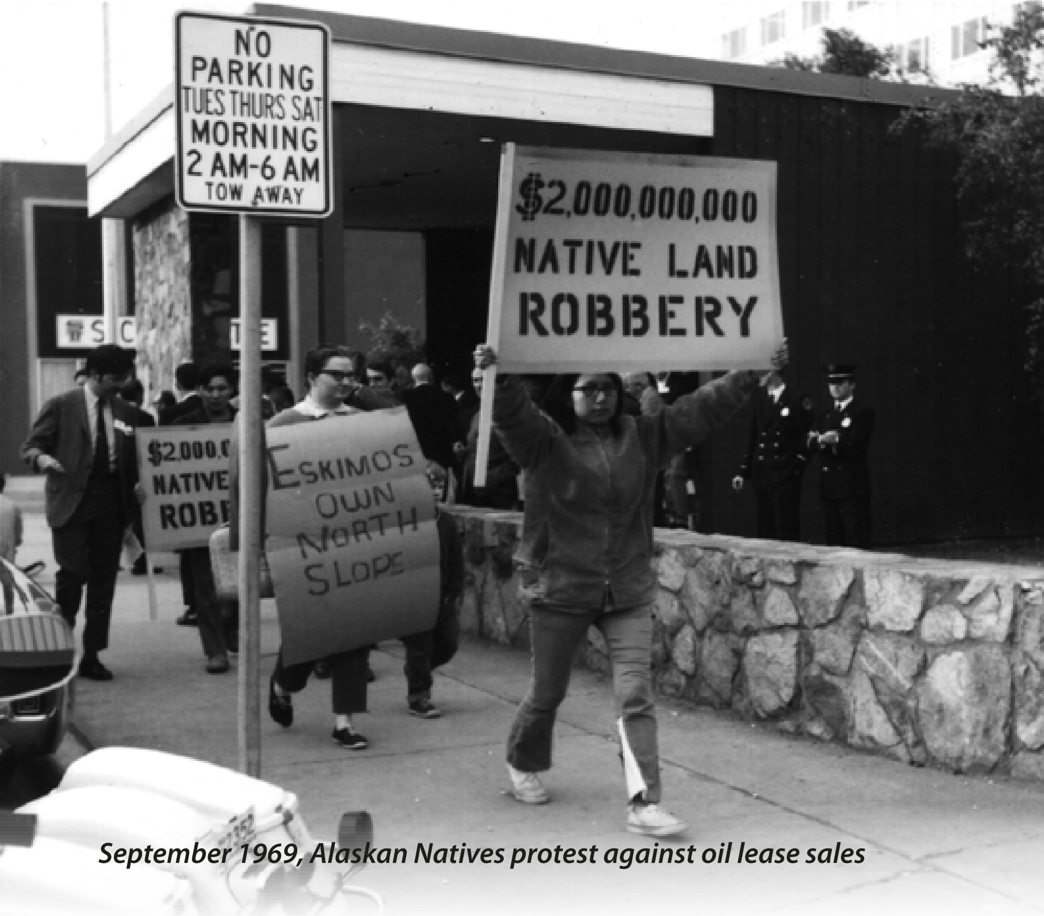
Savoonga News

Times Writer Gets Walrus With Two Sets of Tusks

Fairbanks Group Forms, Elects 1963 Officers

Tundra Times front page, April 1 1963
Howard Rock's newspaper gave a voice to the concerns of Native Alaska

The newspaper's first editorial protest campaign successfully opposed Project Chariot, a US government proposal to explode a hydrogen bomb "for peaceful purposes" (to create a deep water harbor) at the coast near Point Hope. Project Chariot would have contaminated millions of acres of Iñupiat lands.



September 1969, Alaskan Natives protest against oil lease sales

In other regions, Native leaders were meeting to discuss similar issues. It was Willie Hensley's thesis that gave Alaska's Natives the documentation necessary for filing a constitutional claim to their lands, leading to the foundation in 1966 of the Alaska Federation of Natives (AFN), a statewide Native organization that quickly filed a claim on behalf of Alaska's Native population to their ancestral lands, forcing the Secretary of the Interior, Stewart Uldall, to impose a land freeze. The land freeze effectively blocked both the selection of lands by the State of Alaska, and the lease of public lands to the oil industry.

While Congress debated the Native land claims, a governmental study entitled "Alaska Natives and The Land" (1968)[7] confirmed the arguments put forward by Willie Hensley and the AFN, asserting that the Native lands claim was valid.

[7] Alaska Natives & the Land Federal Field Committee for Development Planning in Alaska, Anchorage. 1968

The State government could proceed with lease sales to the oil industry, though with the knowledge that the Natives' land claim must also be met.

Throughout the 1960's many oil companies held exploration permits on the North Slope, though their holes either turned up dry or only revealed natural gas, for which there was no market. On March 12, 1968, following many disappointing exploratory wells, Humble Oil and Atlantic Richfield (ARCO) drilled the first commercially successful exploration well on the bank of the Sagavanirktok River at Prudhoe Bay, discovering an oil reserve that would become the largest in the United States. Other oil companies with exploration permits on the North Slope, which until now had failed to drill commercially viable wells, returned to the North Slope. In 1969 the State of Alaska held an auction for oil leases on the North Slope, which produced $900 million in revenue for the State of Alaska. It took several years for the true extent of the Prudhoe Bay oilfield to be estimated, though from the start it was obvious that this was a discovery of strategic national importance. By 1974, the State of Alaska's Division of Geological & Geophysical Surveys would estimate that the field held 10 billion barrels (1.6×109 m3) of oil and 26 trillion cubic feet (740×109 m3) of natural gas. [8]

As the economic potential of the Prudhoe Bay oilfield became evident, the oil industry was faced with the problem of how to get the oil to market. Early sea-trials with icebreaking vessels had proven that tankering by a sea route through the Beaufort Sea would be impossible. The only viable route would be an 800 mile pipeline from Prudhoe Bay in the north to the ice-free harbor of Valdez in Prince William Sound in the south.

While the State land selections and lease sales had sparked the Native land claim, the idea of the Trans Alaska Pipeline, which could not be built without a right of way across lands, the ownership of which was under dispute, served to accelerate a political resolution of the Native land claim.

[8] Estimated Speculative Recoverable Resources of Oil and Natural Gas in Alaska. Division of Geological & Geophysical Surveys. Department of Natural Resources. State of Alaska. January 1974

To politicians and legal scholars it was obvious that Alaska's Natives had a valid claim to their lands, a claim that must be resolved before the State of Alaska could proceed with land selections and before the oil industry could harvest the massive wealth of the North Slope; a wealth on which the oil-hungry economy of the United States would soon depend. The legal challenge for Congress lay in finding a way to compensate Alaska's Natives - without being in conflict with the constitutional limitations of passing a law that gave preference to specific ethnic groups.

Because Alaska's Natives had hitherto no established cultural concept of land ownership, neither did they have any organizational structure that, in the eyes of Congress, would be a suitable custodian of any land or capital that might result from a settlement. Although recognized by the Federal Government, Alaska's tribes and tribal governments enjoyed only limited recognition by the State of Alaska. The idea of making a statewide settlement between Congress and several hundred rural tribal organizations was not considered a politically or economically viable solution.

In its deliberations concerning the form that a settlement should take, Congress sought to ensure that such a settlement would give wealth and title to land to the Natives in such a way, that such capital and land would remain in Native hands in perpetuity, without being sold to non-Natives or used as collateral for loans, upon the eventual default of which land-ownership could pass to non-Natives. To achieve support from both Congress and the Native organizations, the settlement act would have to achieve these goals. At the same time, Congress had the vision that a settlement with Alaska's Natives should create the economic and cultural infrastructure by which Native Alaska could enter the industrial cash economy and give Alaskan Natives the same social and economic opportunities enjoyed by other American citizens.

Whether this was an altruistic objective or a cynical strategy for assimilation has been the subject of debate for many years. But it was also clear that the law-makers envisaged that a settlement act, besides giving the Natives title to some land and compensation for lands lost, would also extinguish any future claims to lands in Alaska by the Native population.[9]

Following a century of discontent and a decade of fighting for the land, time was running out for Alaska's Natives.[10] The proposal for a land claims settlement that was on the table was the best they were likely to achieve, and the pressure was on from Congress, the State of Alaska and the oil industry to develop Prudhoe Bay and build the pipeline. World oil prices, which had remained somewhat stable for decades, were beginning to rise as US oil production reached its peak in 1970.

Already in 1971, oil prices began to climb worldwide, and the first political and economic signs of what would become the 1973 oil crisis were becoming evident. Oil had been discovered on Alaska's North Slope and America needed that oil.

In 1970 the US Senate approved a land claims bill, but the Natives were disappointed by the amount of land allocated, resulting in further negotiations in both houses of Congress, before the proposal could be put before the Alaska Federation of Natives at their convention in the fall of 1971. The Iñupiat of the Arctic Slope, whose ancestral lands included the Prudhoe Bay oilfield and the National Petroleum Reserve (NPR-A), and who therefore perhaps perceived the proposed settlement as a greater loss than as perceived by Natives in other regions, voted against the AFN motion to accept the proposed settlement, although they accepted the majority vote of AFN approving the proposal.

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[9] See RUDE, Robert R., ***AN ACT OF DECEPTION*** Salmon Run Publishing Company, Anchorage, Alaska 1996 ISBN 1-887573-02-X

[10] Charles Etok Edwardson's biography ***"ETOK - A Story of Eskimo Power"*** (Hugh Gregory Gallagher / Vandamere Press 2001 ISBN 0-918339-59-6) gives a unique insight into the background for the lands claim settlement and the efforts by Native leaders to influence the resulting act which Congress eventually passed.

Similarly, Willie Hensley's autobiography **"Fifty miles from tomorrow"** (Picador / 2009 ISBN 978-0-312-42936-2) is another seminal account of this period in Alaska's history.

The Alaska Native Claims Settlement Act (ANCSA)

On December 18, 1971, President Richard Nixon signed the Alaska Native Claims Settlement Act[11] (PL 92.203) . The act, known as ANCSA, gave Alaska's Natives the right to select, from 90 million acres of public land, 44 million acres to which they would receive title. At the same time, the act allocated $962.5 million as compensation for lands lost and for all claims to future Native lands to be extinguished.

The land and money was not given directly to the Natives as individual settlements, nor were they given to the tribal organizations, which at the time most closely represented the Natives. Instead, ANCSA created 13 new regional corporations and 208 village corporations, that would become the custodians of land and the compensation capital.

The regional corporations were defined according to the regions that broadly mirrored Alaska's different Native groups and echoed the regional structure of AFN.

Membership of the corporations - regional and village - was open to any Alaskan Native who was at least "quarter blood" i.e. having at least one grandparent who was Alaskan Indian, Aleut or Eskimo. Only those Alaskan Natives born before December 18, 1971 became shareholders under ANCSA - future generations would have to inherit shares from their parents and relatives, a provision that, given the typically large size of Alaskan Native families would effectively dilute the number of shares per person over the coming generations, a dilution that could only be offset by the growing value of the shares.

Some historians and Native leaders believe that ANCSA was a "divide and conquer" strategy by Congress, despite the influence that Native organizations had in its formulation.

Of Alaska's total in-state population of 300,382 (1970 Census) the Native population amounted to 54,704 persons; approximately 18% of the state population. Of these, 31,227 (57% of Native population) lived in Alaska's rural communities.

[11] The Alaska Native Claims Settlement Act, 1971
full text from http://www.lbblawyers.com/ancsa/ancsatoc.htm#top (and many other sources)

Nixon signs ANCSA
December 18, 1971

This figure of 57,704 Alaskan Natives is somewhat lower than the approx. 80,000 enrolled in the ANCSA corporations, because roughly one-third (31.62%) of the living Native population born before December 18, 1971 now lived outside the State of Alaska.

Most Natives enrolled as shareholders in the regional and village corporations of the region in which they lived. In each they received one hundred shares. Some of those who lived outside the state enrolled in the so-called Thirteenth Corporation, while others enrolled as "at-large" shareholders in a regional corporation. The Thirteenth Corporation received a share of the monetary compensation, but no land.

Of the $962.5 million compensation, half was distributed to the village corporations, with the remaining half being distributed between the thirteen regional corporations. Half of the 44 million acres of land awarded under ANCSA was allotted to the village corporations, the remaining half to the regional corporations.

Arctic Slope Regional Corporation
(ASRC)

NANA Regional Corporation
(NANA)

Doyon Limited
(DOYON)

Ahtna, Incorporated
(AHTNA)

Bering Straits Native Corporation
(BSNC)

Sealaska Corporation
(SEAC)

Calista
Corporation

Chugach Alaska Corporation
(CAC)

Bristol Bay Native Corporation
(BBNC)

Cook Inlet Region, Inc.
(CIRI)

Koniag, Inc.
(KANA)

The Aleut Corporation
(TAC)

The twelve regional corporations created under ANCSA

Merry Christmas

To all our friends Everywhere

Tundra Times

25c

Wednesday, December 22, 1971

Fairbanks, Alaska

NIXON PENS BILL INTO LAW

'I Want You to Be Among the First to Know...' Nixon Says

By MADELYN SHULMAN
Staff Writer

North Slope Borough Proposal–
'... Boroughs Dragged Kicking, Screaming Into Existence'

Upicksoun's Eloquent Protest–
'We Inupiat Have Never Wanted Money as Such...'

Eligible Native Baby–
Claims Law Baby Hard to Find

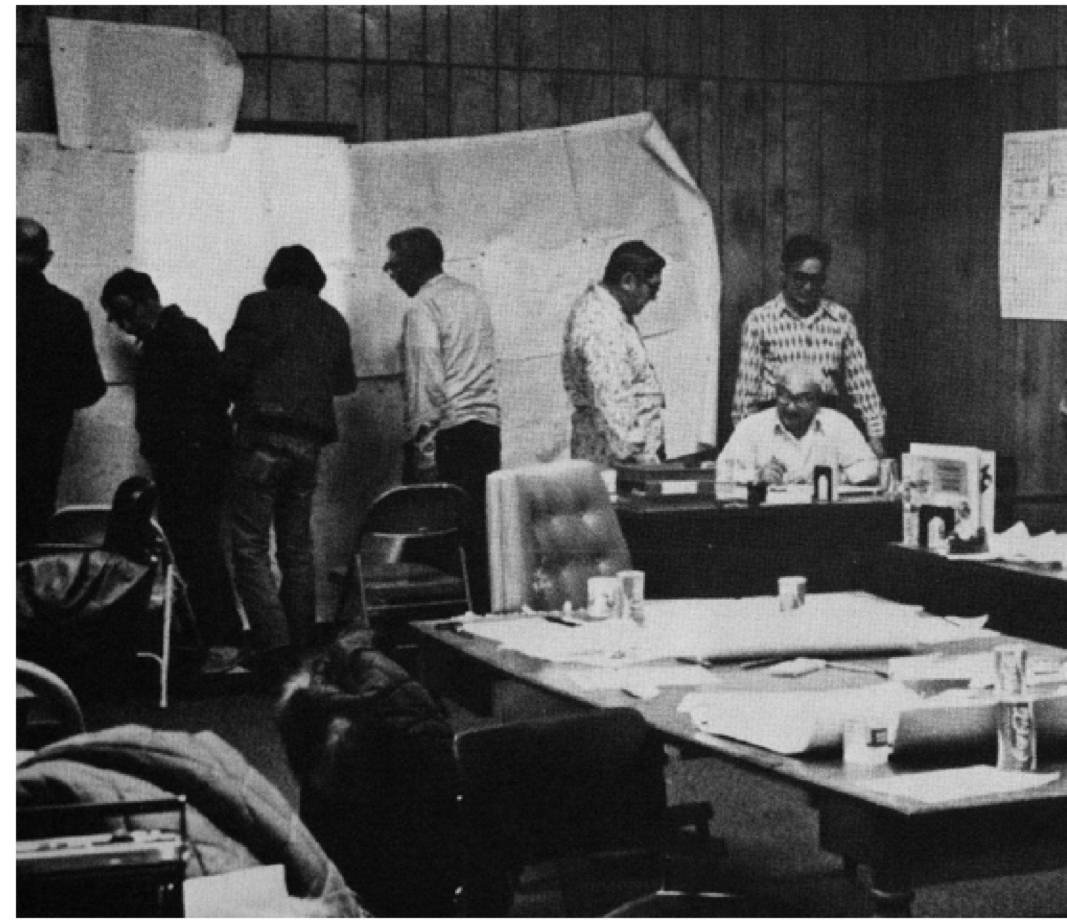
Tundra Times front page, December 22, 1971

Village corporations were entitled to select lands contiguous to the village boundaries, to which they would receive the title to the surface rights (such as land-use, subsistence, forestry). The regional corporations could select lands throughout the region, to which they received both surface and sub-surface (mineral) rights. The sub-surface rights to lands selected by village corporations was given to the regional corporation for that region.

Of the 44 million acres allotted under ANCSA, most were to be selected based on their subsistence or potential resource value, though approximately 2 million acres were reserved to cover sites of ancestral or cultural importance such as burial grounds, historic sites and sites of spiritual or cultural importance.

In selecting their lands, the corporations, often with the help of professional surveyors and geologists, sought to select lands containing mineral wealth.

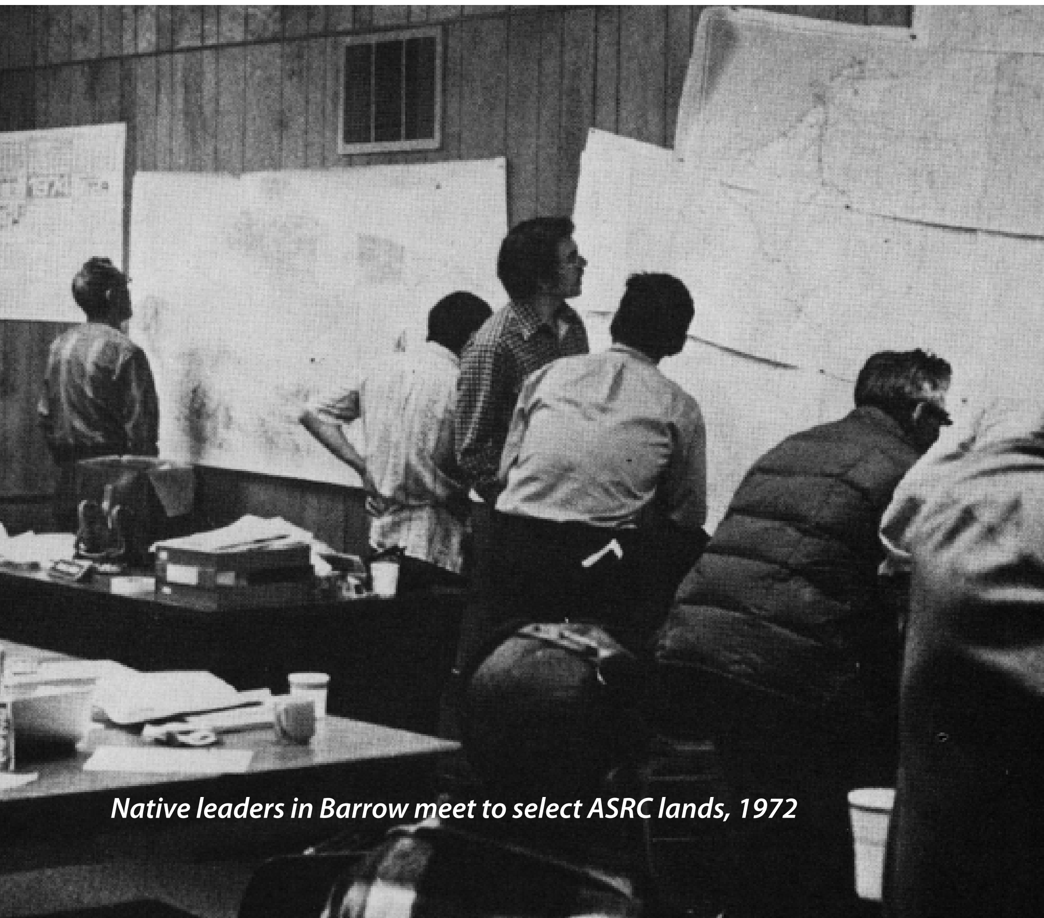
For both village and regional corporations the value of the land for subsistence hunting and gathering was also important and using the traditional knowledge of the elders, the corporations also focused on selecting lands to ensure an adequate subsistence base for future generations.



The distribution of land entitlement to the regions was based on the land area of the region - in comparison with the other regions. The village land entitlement was based on the enrolled population - again in comparison to the population of other villages.

The regional corporation's share of the compensation money was based on its proportion of enrolled Natives to the total number enrolled, while the formula for the village corporations was based on the proportion of stockholders to the total number of stockholders in the region.

The authors of ANCSA did not envisage that all village corporations would become commercially successful and profitable entities, which is why the sub-surface rights were given to the regional corporations. It was also important that wealth generated in one area of land, would also benefit the entire region.



Native leaders in Barrow meet to select ASRC lands, 1972

Similarly there were concerns that certain regional corporations, whose lands included oil or mineral wealth, would benefit more from ANCSA than the corporations of other regions less fortunate in their mineral resources. Therefore ANCSA included a provision[12] whereby the regional corporations share a major proportion of certain resource revenues with each other.

ANCSA was more than a means by which Congress compensated the Natives to enable the development of the oil fields. It was also a legislative tool by which all future Native land claims would be extinguished, freeing future governments of the difficulty of dealing with Native Land Claims in Alaska. This aspect of ANCSA has been challenged several times since. But more than anything, ANCSA was a means by which the Native population could be given some control of their lands and their destiny, enabling them to own and operate their own corporations, make investments and develop employment and business opportunities for their shareholders. ANCSA was seen by congress as an alternative to the reservation system of the lower 48 states, which had many flaws.

With some exceptions, notably those original provisions that prevented the transfer of stock to non-natives, ANCSA regional and village corporations were created as normal joint-stock companies, formed and operated with a view to making a profit.

In those regions where oil and mineral resources have been developed, the ANCSA corporations, by virtue of their land ownership, have certain commercial advantages. Corporation subsidiary companies, often specializing in contracting or oilfield services, have a competitive edge over outside contractors, as the oil and mining companies have an interest in maintaining good relations with the regional and village corporations.

The ANCSA regional corporations grew out of the regional structure of the Native organizations that originally formed AFN and filed the land claim. In these years, these organizations were essentially political and cultural in nature.

[12] See ANCSA, paragraph 7(i)

As ANCSA created the regional corporations as profit companies, the Native associations remained non-profit organizations, through which the Natives of each region could continue and develop the region's political, social and cultural work. Many of these non-profit organizations have since become important social and cultural locomotives in the communities, having in some cases established the capacity, expertise and organization to operate professional social and health care program.

The regional corporations have become a vital factor in the economy of Alaska. Corporations such as Arctic Slope Regional Corporation (ASRC), Northwest Arctic Native Association (NANA) and, to some extent, Doyon, which own mineral-rich lands and are active in these industries, have leveraged their initial compensation capital from ANCSA to become companies with billion dollar turnovers, providing employment and regular dividend income for their shareholders. Some regional corporations, less fortunate in their mineral resource base, have fared less well.

Some of the contracting companies owned and operated by Alaska's regional and, in some cases, village corporations, have achieved great success in their field of endeavor - such as drilling, general and government contracting, road construction, catering and security services, transportation and oilfield services. In partnership with the oil and mining industries, some of these companies have become world-class, with exemplary productivity, health and safety records and corporate social responsibility programs.

This journey has taken 40 years. Many village corporations ran into economic trouble in the early years, often because their resource base was inadequate or their leadership were faced with too many decisions too quickly.

While the AFN (with the dissent of the Arctic Slope Native Association) had voted to accept ANCSA, it must be remembered that it was a choice of "this settlement or no settlement" - the Natives had no alternative

Native corporation contracting companies have played a key role in developing Alaska's oil resources

choices except that of missing their historical window of opportunity and perhaps never getting a settlement. Like all laws, ANCSA was a political compromise, one which forced the Natives to accept a corporate system that was essentially foreign to their culture and which ran counter to their tribal concepts and aspirations. It is likely that the Natives, and probably most of the politicians and law-makers, did not fully comprehend the implications and consequences of many aspects of ANCSA. Everyone was "looking at the big picture" - the Natives wanted recognition, compensation and land, and Congress wanted the oil and a permanent settlement of Native land claims in Alaska..

Neither would it today be correct to say that ANCSA has been an unequivocal success - it has had its failures and it continues to have it critics. Perhaps its greatest flaw was that the shareholding model, conceived in 1970, only provided for the first generation of Native shareholders, leaving future generations to rely on inheritance. Since 1971, some regional and village corporations have developed ways to enroll the "afterborn", others have yet to do so. The gradual dilution of shares between second and third generations, together with the gradual growth of the non-shareholder proportion of rural communities has led to problems which the authors of ANCSA perhaps did not envisage and certainly did not adequately address, leaving it to the corporations to address the question of continuity and inclusion at a later date.

For all its flaws, ANCSA was better than most other Native land claims settlements in the US and other countries in the last century. As had been the overriding tradition with regard to Native Alaska, Congress again avoided the idea of reservations, adopting instead the corporate model. Although this corporate approach has certainly hastened the economic and cultural assimilation of Alaska's Native population, it has also empowered them by recognizing their traditional rights and with the organizational and economic framework with which they have the potential to navigate their own course in a constantly changing world – a world in which change would inevitably have impacted Native Alaska even without a settlement act.

Without ANCSA, Alaska's Native communities would have remained isolated economically and politically, enjoying little of the wealth and benefits that have followed with the growth of the oil and mining industries in Alaska. Though Alaska's aboriginal population, the 104,871 Natives today constitute less than one seventh of Alaska's 710,231 citizens[13] , a number that, combined with their residence in predominantly rural communities far away from the political and economic centers of the south would have rendered them a powerless minority in their own homeland.

Because of ANCSA, and not least because of the Native organizations and entities which fought for the land and have taken responsibility for the development of Native Alaska since 1971, Alaska's Native population enjoys a well-deserved and almost unique level of influence and involvement in the politics and economic affairs of their state.

Today, many of Alaska's largest corporations are Native-owned and managed, and while the growing white population in the South Central region have also reaped the wealth of Alaskan oil since the 1970's, so too have the Native communities achieved better housing, public services and utilities, education and employment opportunities. In a period in which the subsistence lifestyle of the Native communities would be challenged by many social and economic factors and global trends that are fully independent of Alaska's oil industry, the economic benefits of oil and gas production, mineral extraction, forestry and commercial fishing that have accrued to the corporations and the communities has given Native Alaska some economic resources with which to strengthen and maintain the traditional culture and way of life.

ANCSA and the developments which followed the act have shaped the opportunities and development of Alaska's Native communities for over forty years, and any contemporary study of an Alaskan Native community cannot ignore the importance and consequences of the land claims settlement. Of course it must be said that some villages fared much better than others.

[13] State of Alaska, Department of Labor & Workforce Analysis, figures based on US Census 2010

Barrow

Wainwright

Atkasuk

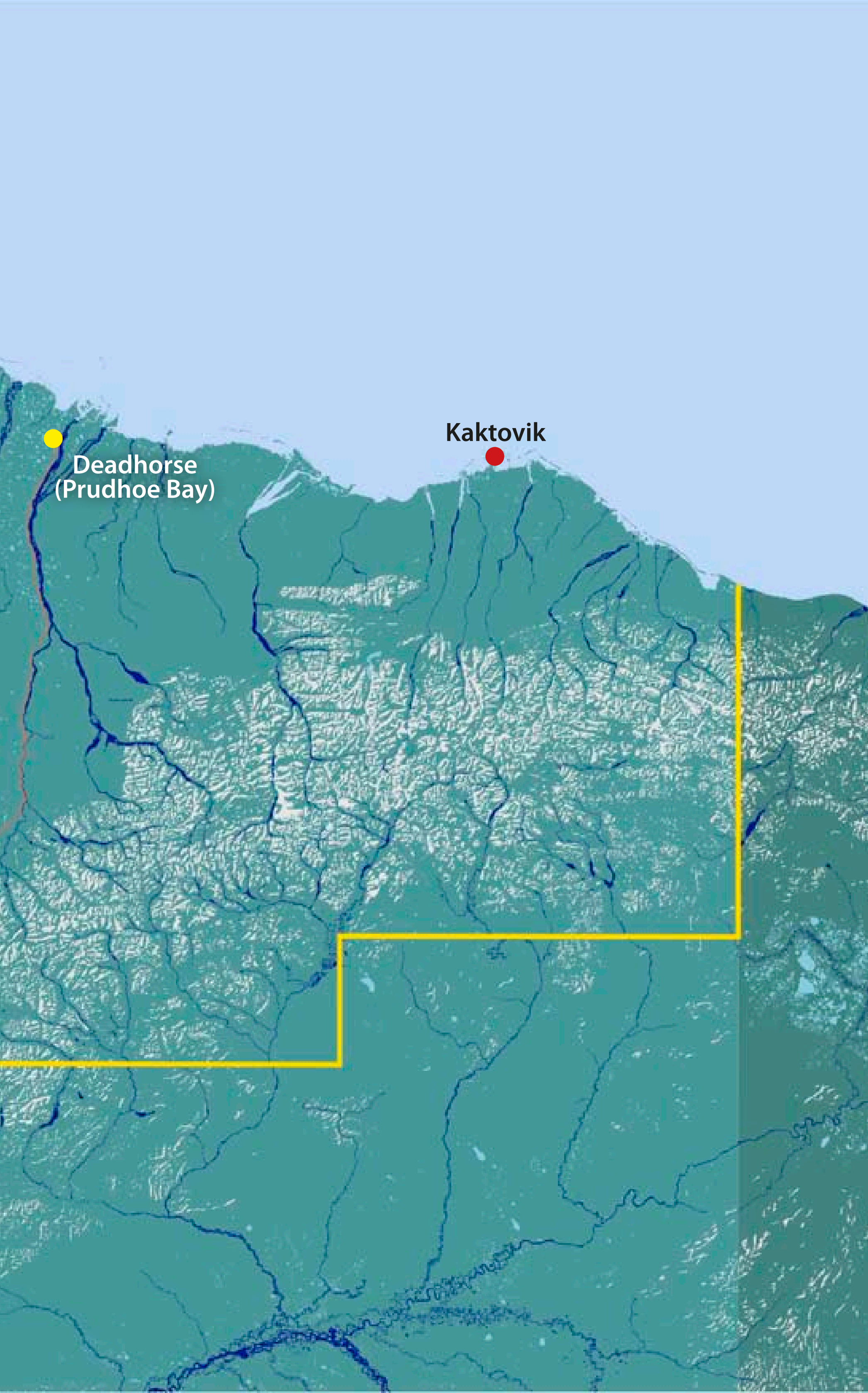
Nuiqsut

Point Lay

Point Hope

Anaktuvuk Pass

The North Slope Borough
Since 1972 the largest municipality in the United States (by area)



The North Slope Borough

When ANCSA was passed in 1971, the Arctic Slope comprised seven villages, each predominantly populated by Iñupiat. District 21, as the Arctic Slope was then known for electoral and administrative purposes, had minimal local government and even less self-determination.

The Iñupiat of the Arctic Slope voted against the acceptance of ANCSA because they felt that it would cost them too much land. The state and federal governments had already taken NPR-A and Prudhoe Bay, as well as the Arctic National Wildlife Refuge (ANWR) to the east.

The Iñupiat had claimed traditional use and occupancy to the entire 56,764,800 acres of the Arctic Slope, and ANCSA had given them but 5,000,000 acres - less than 10% [14]. The fact that the oilfields and oil reserves already delineated in the region lay on state or federal lands from which the Iñupiat would receive no royalty income, led the Iñupiat leaders to consider new ways of asserting their traditional sovereignty on the Arctic Slope.

Under the leadership of Eben Hopson[15] , the Iñupiat of the Arctic Slope decided to form their own borough municipality, by which they would achieve municipal control of the entire North Slope, including the areas owned by the state and federal governments.

The Iñupiat could see, that by forming a borough municipality, they could establish their own tax revenue base with which to fund the modernization of the North Slope communities and their public services, without being dependent on the political goodwill of the state or federal legislatures. Through their borough, they would be able to tax property in the oilfields and assume environmental, planning and development control over the entire region – even the lands not awarded to the Native corporations under ANCSA.

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[14] According to the U.S. Census Bureau, the borough has a total area of 94,796 square miles (245,520 km2), of which 88,695 square miles (229,720 km2) is land and 6,101 square miles (15,800 km2) (6.4%) is water.
The borough is larger than 39 states. (source: wikipedia)

[15] Eben Hopson (1922–1980), Native American politician, the only person from Alaska's North Slope to serve in the territorial legislature, later becoming a state legislator and co-founder/first mayor of the North Slope Borough and a founding father of the Inuit Circumpolar Conference (ICC)

Eben Hopson - the first mayor of the North Slope Borough

Their plan was initially opposed by the State of Alaska, and the oil companies, all of whom saw the creation of the "North Slope Borough" as an added complication and cost factor in the extraction of North Slope oil. Hardened by the recent fight for the lands claim, the Iñupiat pursued their campaign for a borough, which they, akin to their Inuit cousins in Canada and Greenland, who were also campaigning for self-determination, envisaged as a home-rule government for the Arctic Slope.

Once again, the Iñupiat had to establish their traditional ancestral sovereignty over the entire region, because they could only succeed under US municipal law, if they could prove that the new borough would comprise lands over which they already had long-established use and occupancy. Since the Iñupiat, almost a century earlier, had been relocated to the coastal villages, the traditional nomadic use of their ancestral hunting grounds took on a new importance. The fact that the Iñupiat had used and occupied areas in what was still NPR-4, in the Colville Delta, and in the lands of the Arctic National Wildlife Refuge, gave foundation for their argument for a borough.

The importance of inland settlements such as Atqasuk, Anaktuvuk Pass and the Colville Delta area (now known as Nuiqsut) cannot be underestimated today, because the existence of these settlements and hunting grounds proved beyond doubt that the Iñupiat land use and occupancy embraced the entire region and not merely the coastal areas. The Iñupiat won their case and on July 2, 1972 the North Slope Borough was incorporated and became the largest county-level political subdivision in the United States with a population of approx. 2,700[16] .

When examining both the modern history and present status of the North Slope, it is important to understand that this large region has a small population of less than 9,500[17] .

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[16] US Census, 1970, North Slope Borough population - 2,663, US Census 2010, population 7,998

[17] US Census, 2010, North Slope Borough population - 9,430

The advent of the regional and village corporations, the new Native associations, and the Borough government with all the public services and utilities which it soon established, created a sudden and massive need for people to fill the roles of political leaders, corporate and public managers and administrators and a wide range of employees working in the community - at a time when the oil industry was also creating competing employment opportunities.

Some jobs could be filled by outsiders, particularly in technical or engineering trades. It is therefore hardly surprising that the leadership of the various corporate and public entities has been filled from the same limited number of Native leaders, especially in the villages where the pool of available and experienced adults is even more limited.

It was natural in the early years, that leadership positions in the new corporations and government were filled by election of those Natives who had already proven themselves to be capable leaders - in the extended family and community, as captains of whaling crews, or as leaders of the fight for the land and the municipality. This trend continues with the population demographics and community dynamics of the North Slope villages today, although a younger generation is coming of age and has begun to take leadership positions.

The creation of the borough is seen by many as a stroke of political genius, in that it gave the Iñupiat of the Arctic Slope a lot of what they otherwise would have lost under ANCSA. From its incorporation, the borough aspired not only to the ideals of any American municipality, but also to the cultural vision and aspirations of the Iñupiat people.

There were some Iñupiat, notably Charles "Etok" Edwardson who, under the banner of the Iñupiat Community of the Arctic Slope (ICAS), saw the lands claim and the coming oil wealth as but the first step towards Inuit independence from the United States, possibly through the creation of a pan-Arctic state together with their Inuit cousins in Canada and Greenland.

While Knud Rasmussen had proved that such an idea had clear historical substance, it was never a realistic political possibility that the US would accept such a solution, not least because of the oil and the geostrategic importance of the Arctic Slope during the Cold War. The US simply has no tradition for removing stars from its flag.

In 1977, Eben Hopson, who had become the borough's first mayor, took the initiative to create a closer cultural and political bond with the Inuit in Alaska and Greenland, and subsequently the Russian Inuit in Chukotka, by hosting a meeting in Barrow which led, a year later, to the inauguration in Greenland of the Inuit Circumpolar Conference. The realization of Inuit home rule on Alaska's North Slope was also an inspiration to the Inuit of Canada and Greenland, who within a few years also would achieve their own forms of home rule.

For the North Slope communities, the creation of the borough would bring oil revenues to the villages, both in the form of capital investments projects such as schools, health clinics and housing, and also in the form of employment and social and cultural programs. The borough would also establish a Department of Wildlife, to better represent the subsistence interests of the Iñupiat and through the creation of a unique research department, to combine the traditional knowledge of the Iñupiat with modern science in the monitoring and protection of important wildlife species on the North Slope and its coastal waters.

In 1972 all these benefits and visions lay in the future. Under the terms of ANCSA, the Iñupiat had a limited time in which to complete their land selections, and their goal remained one of gaining title to as much land as would be possible within the terms of ANCSA. At the time they had little idea of how much oil money would flow into the newly created borough nor how rapidly economic growth would bring lasting changes and challenges to the villages of the North Slope.

For 176 Iñupiat residents in Barrow the coming years would bring particular challenges.

June 2015 - Nuiqsut celebrates the fourtieth anniversary of the incorporation of the city. Residents pitched their tents to remember the tent city of 1973

While ANCSA had given the Iñupiat citizens of the seven North Slope villages the opportunity of selecting lands around each village for ownership by the village corporation, it was obvious that ANCSA made no provision for future Native surface land-ownership by the villages on lands that were not immediately contiguous to the township. For the Kuukpikmiut, whose forefathers came from the Colville Delta, and who had hunted and gathered in the region on a nomadic basis for decades, the prospect of losing their traditional hunting grounds was a concern.

Although the Iñupiat had for centuries known that there was oil under the lands of the Colville Delta, there was little publicly available evidence in the early seventies that indicated the presence of commercially recoverable oil reserves in the Delta. The Kuukpikmiut were primarily interested in maintaining their use of the Colville Delta for cultural and subsistence reasons. In Barrow, under the auspices of both the North Slope Borough and Arctic Slope Regional Corporation, the leaders of both of which were heavily occupied with land selections, a plan for the resettlement of the Colville Delta was developed.

The idea was to encourage some families, particularly those of Kuukpikmiut ancestry, to move to the delta and establish a permanent settlement which, under ANCSA, would be entitled to land selections and federal support, and which also would enable their regional corporation ASRC to claim the valuable sub-surface rights to some of the lands of the Arctic Slope which the State of Alaska selected under the Statehood Act.

Thus the founding or resettlement of an new, eigth community was vital not only for the Iñupiat of Kuukpikmiut ancestry, it was also important for the economy and jurisdictional authority of the North Slope Borough, as it was also vital for the lands and mineral resource interests of Arctic Slope Regional Corporation. The village corporation to which Nuiqsut would be entitled under ANCSA was incorporated in Barrow in 1973, just before the village was resettled. The Kuukpikmiut had staked their claim to their land. In April 1973, fourteen Iñupiat from Barrow made the first trip overland to Nuiqsut and established a tent city that would be their home for the next eighteen months.

Most of those who resettled Nuiqsut knew each other from Barrow. In fact, most were related by blood or marriage. For these pioneers it was an adventure. Besides a small cash payment from ASRC to help them get started, they had the respect and admiration of their kinsmen in Barrow, although there were many Barrow Iñupiat who were skeptical as to whether the settlers would be able to make it through the winter on their own.

Of those first 176 settlers[18] in 1973, 73 were adults over 21 years age (78 over 18 years age) and 103 were young, under 21 years age (17 under 18 years age). 69 of the children were 12 years or younger. The youngest were under 1 year old, and there were 24 children under 7 years old.

For these children and young people, it was also an adventure. Many of them were used to joining their parents on long hunting trips and, for them, this trip did not at first seem so unusual. Leonard Lampe, who in 1973 was six years old, remembers fondly that spring in Nuiqsut, when he asked his father "How long are we staying here?" to which his father replied "Forever!" Gradually, the children were getting used to the idea of Nuiqsut as the place where they would grow up.

Even for Iñupiat who are accustomed to living off the land, the resettlement of Nuiqsut and the Colville Delta was a test of their skills of endurance and self-sufficiency. For the first eighteen months, even with temperatures of 40 below, they had no buildings for shelter and they lived in tents, typically 10' x 10' tents or two tents sewn together. The tents were not only their homes. During the daytime, many of the tents were vacated so that they could be used for communal activities such as church, meetings and the establishment of the first village school.

Fresh water was collected daily from a nearby lake. Apart from a few provisions such as tea, coffee and biscuits, that they had brought with them from Barrow, they had to fend for themselves, at the same time as they had to learn their way around their new lands and to identify the best fishing and hunting sites.

[18] See Appendix 1 for a list of the original settlers sorted by family and household

NUIQSUT VOICES

MAE MASULEAK
Original 1973 settler
Elder
Previous Mayor of Nuiqsut and teacher

"We travelled by ski-doo from Barrow, the journey took two days. My family was the fifth to arrive here, and we pitched our tent beside our neighbours. - the Tukle's, the Ahkiviana's and the Ipalook's - they had also come from Barrow, and and I told my husband, that all the folks Barrow that we used to go hunting with, they are all living here, it's still the same, we work together and hunt together. That first summer was so beautiful here, I really loved this new land we had come to"

April 1973 - the first settlers arrive in Nuiqsut

They called their new village Nuiqsut, which in Iñupiaq means “the new horizon”, a fitting name for a new home on a bluff above the Nechelik Channel, from where they could see twenty or thirty miles in every direction. As the spring thaw arrived, the villagers could appreciate the wise choice of their location, high enough above the river to escape the rising flood of the Colville River and its tributaries, yet still within easy traveling distance by boat, sled and dog-team or skidoo to the ocean or the wildlife-rich areas of the surrounding tundra.

Though many of the men, coming from Barrow, were most accustomed to subsistence life on the coast, they quickly adapted to their new hunting grounds, not least because so many of them had familial connections to the Colville Delta. Nuiqsut - or Nooiksut - was the old name of a traditional hunting camp on the Nechelik Channel, close to where the Woods family had a fishing camp.[19]

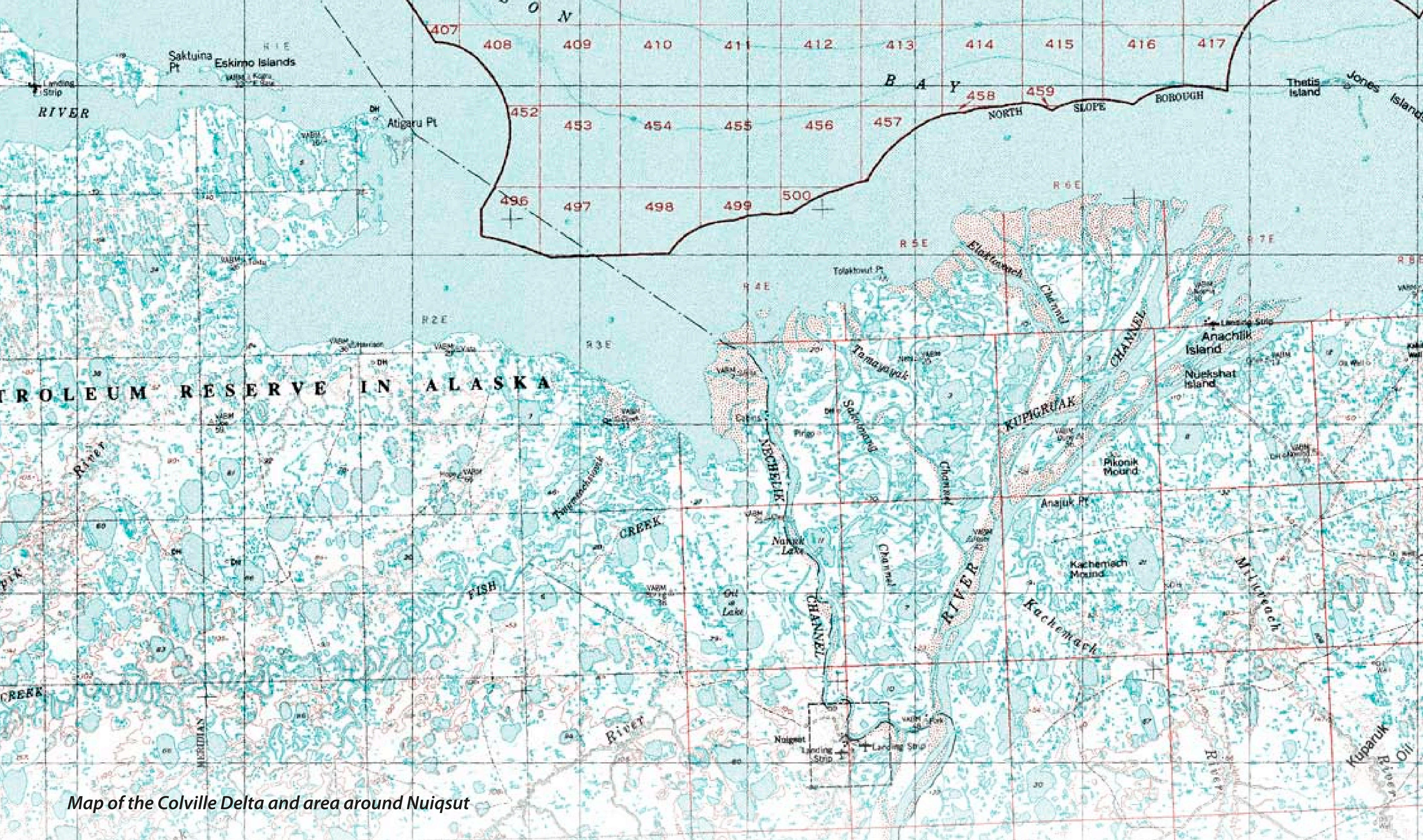
By the end of 1973 the 27 families had organized themselves into 31 households - though as yet they had no houses in which to live - Nuiqsut was “Tent City”

[19] In a summary of rural communities and tribal villages, the first draft of ANCSA did not include Nuiqsut. The Bureau of Indian Affairs did certify the village in the first amendments to the act in 1972, but located the settlement farther north on the Nechelik Channel, close to the Woods Camp. (Galginaitis et al, 1984:14-17) This certification, together with the Woods camp and the camps of other Iñupiat families such as the Tukles and the Allens were vital in establishing the Kuukpikmiut traditional use and occupancy of the Colville Delta and thus the resettlement of Nuiqsut in 1973.

The Woods' Camp, December 2013

Kuukpikmiut hunters have travelled and hunted in the Colville Delta region since time immemorial, establishing temporary camps in many places to which they would travel at different times of the year. Hunters have camped at the Nigliq Camp at the mouth of the Nechelik Channel for centuries. The Woods family had lived there for many years during the twentieth century, building sod huts and later, wooden houses. At camps like this, the Kuukpikmiut became skilled hunters, able to live off both the ocean and the land.

Though apparently uninhabited today, Nigliq Camp remains in regular use by the hunters of Nuiqsut. Several families set their nets here when fishing, both in the summer and, as in this photograph, in the winter, when fishing is undertaken with nets under the ice. Hunters travelling to and from the ocean are also regular visitors to Nigliq Camp. This was one of several camps the documented traditional use and occupancy of which was instrumental in ensuring the Kuukpikmiut claim to their ancestral lands in the Colville Delta and the resettlement of Nuiqsut.



Map of the Colville Delta and area around Nuiqsut

As much as anywhere on the North Slope, the Colville Delta is a wetland in which the many rivers and channels provide the easiest and safest routes between the village and the hunting and fishing grounds. Travelling overland in the summer is only possible on foot in most places, and the going is slow and tiresome, particularly in mid and late summer mosquito season. In the winter, the Iñupiat cover great distances overland by snow machine, travelling sometimes as far as Barrow or Prudhoe Bay.

For the 27 original families and those who followed, the founding of Nuiqsut necessitated developing an understanding of their new land and the many hunting grounds. Given the fact that they had to travel to different places in different seasons to reach the fish and wildlife they needed, the process of learning the land was a demanding one, particularly in the early years of Nuiqsut. Many settlers were fortunate to have elders whose traditional knowledge and wisdom could guide them as they began to learn their land.

From the study by Galginaitis et al, 1984, it is evident that the first settlers of Nuiqsut in 1973 were predominantly direct descendents of Iñupiat who had maintained traditional use and occupancy of the Mid-Beaufort Sea Region (Colville Delta) prior to 1940. These study results are worth quoting verbatim here:

Through the use of kinship data from the Barrow genealogy and our own collection in Nuiqsut, we were able to characterize the settlement of Nuiqsut in 1973 as a kin-based group of 31 households. Almost all household groups had both cosanguineal and affinal links to traditional users of the Mid-Beaufort Sea Region. In fact, many household heads of the 1973 settlers were born in the Colville River area. We traced the kinship ties of the original settlers Nuiqsut in 1973 to the pre-1940s populations with the assistance of the Barrow genealogy (MacLean 1971).

Of the 31 original households in 1973, there were 29 male household heads and two female household heads. Of the 29 male household heads, 19 were linked to Nuiqsut land use through direct descent, 8 were linked to Nuiqsut land use through close or distant affinal ties, and two had undeterminable kinship ties. The two female household heads had ties to Nuiqsut land use through direct descent.

ORIGINAL SETTLERS OF NUIQSUT AND KIN RELATIONS
TO THE PRE-1940's TRADITIONAL LAND USE
OF THE MID-BEAUFORT SEA REGION

Kin Ties	Male household heads	Female household heads	Total	Spouses of male household heads
Direct descent	19	2	21	17 (a)
Affinal	8	–	8	2
Unknown	2	–	2	8
	29		31	27 (b)

(a) Includes 10 husband-and-wife household units where both male and female spouses have direct descent ties.
(b) Two male household heads do not have spouses.

One of the women was single and lived with her adopted son.

The other woman, the granddaughter of a pre-1940s family, lived with two unmarried children. Her son-in-law also established a household in Nuiqsut at this time.

We then examined the kinship ties of the 29 male household heads' wives to the documented users of the Nuiqsut area. Of the 27 wives of male household heads, 17 women had direct descent ties to users of Nuiqsut land, and the remaining 10 had affinal links through their husbands or could not be traced. Ten of the 31 original Nuiqsut households were cases in which both the husband and wife had direct descent kin ties to traditional Nuiqsut land users. This would indicate that one third of the original Nuiqsut household heads derived from an intermarrying population located in the Colville River area. Although marriage propinquity is often noted for aboriginal Iñupiat, the fact remains that many of the Mid-Beaufort populations during the twentieth century had moved to Barrow and other North Slope areas.

Therefore, we must conclude that kin ties to the Mid-Beaufort region and the Colville River remained effective throughout the twentieth century, despite dispersal of family groups. Kinship and marriage ties continued to perpetuate an earlier pattern of traditional land use in on. (Galginaitis et al, 1984)

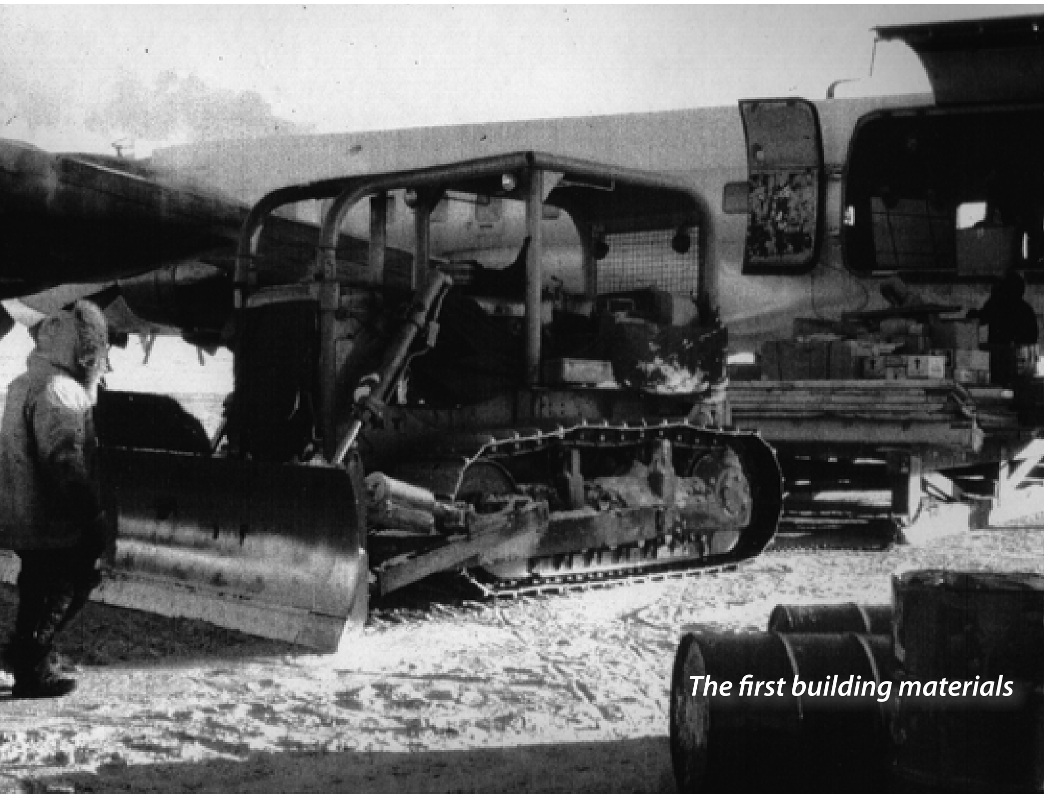
During the spring of 1973, before the thaw, and during the following winter, it was possible to bring further supplies from Barrow over the tundra, using tracked vehicles. From the tent city on the bluff above the river, the villagers began to plan the layout of their new village. In the beginning, the only available airstrip was five miles away, so there was no regular supply of provisions or mail, and even the arrival and departure of visitors and medical evacuations was severely limited.

It was not until 1976/77 that a gravel airstrip was constructed beside the river, and this proved to be a poor location due to flooding during the spring thaw, and was only able to handle smaller aircraft. The current airfield to the south of the village was constructed in 1981/82.

As in many North Slope communities, it was clear from the start that construction on the tundra would require pilings, sunk into the permafrost, supporting buildings approximately three feet above the tundra, to prevent heat from the buildings melting the permafrost and thus causing subsidence of the buildings. In later years, when heavy machinery and capital improvement funding became available, it became more common to use both pilings and gravel pads - an approach that is common in the oilfields today; in Nuiqsut today, most buildings are constructed on pilings directly on the tundra.

The first construction projects in Nuiqsut in 1974/75 were funded by ASRC and included 30 houses, a general store building, a building to house both the village corporation office and the health clinic and some school buildings. The houses were mostly 800 square-foot buildings with a single room, which have since been divided into several rooms.

The new houses were assigned to families by each family drawing lots as each house was completed.



The first building materials

It was the original plan that ASRC would sell these houses at a cost to each family of $100 a month for five years, $6,000 dollars per house. Most families were unable to make these payments, so eventually Kuukpik Corporation assumed this debt.

The housing construction program funded by ASRC, together with subsequent and much more costly capital improvement programs funded primarily by the North Slope Borough since 1975, served not only to provide the necessary housing and infrastructure for the community, but also created welcome employment for the local adults, primarily the men, during the construction periods. Between 1975 and 1981 as the tax revenues from the oil industry began to flow, the North Slope Borough embarked on an ambitious capital improvement program throughout the eight North Slope communities.

North Slope Borough, Capital Improvement fund expenditures 1973 1981 (in dollars)

CIP budget area	North Slope Borough	Nuiqsut	%
Education & Service	94,784,458	13,082,458	13.80
Public Roads, Streets etc.	28,414,563	3,955,053	13.92
Public Housing	100,265,124	7,120,419	7.10
Sewage Treatment & Disposal	28,554,764	927,417	3.25
Airport & Terminal Facilities	7,289,953	4,776,083	65.52
Sanitary Facilities	39,756,299	182,716	0.46
Light, Power and Heat	22,270,202	2,644,122	11.87
Water Facilities	28,204,062	810,496	2.87
Urban Development	6,251,553	0	-
Public Safety	6,185,250	0	-
Health	2,934,770	0	-
General	1,202,889	0	-
Library / Cultural	46,198	0	-
Communications	28,956,719	0	-
Parks & Recreation	175,000	0	-
TOTAL (1973 - 1981)	**395,291,804**	**33,498,764**	**8.47**

North Slope Borough Capital Improvement Fund expenditures 1973-1981
(Galginaitis et al, 1984 from North Slope Borough records)

From the aforementioned figures it is clear, that long before the discovery of Alpine and any direct revenue from the oil industry for the use of Kuukpik lands, the community of Nuiqsut was, like the other North Slope Communities, both dependent on a borough capital improvement program that was ultimately funded by oil revenues, and that the community as a whole aspired to the same level of material improvement as that being undertaken in the other North Slope communities.

For readers unacquainted with the North Slope or the Arctic in general, it must be underlined that the cost of providing capital improvements such as housing and urban infrastructure in the Arctic is much higher than the cost for similar investments in urban lower-48 states. There are three primary factors for this - firstly the unique climatic and physical conditions of the Arctic tundra environment, which present particular challenges to construction and future maintenance, secondly the high cost of transporting heavy, high-volume building materials and machinery to Arctic locations, to which there is no road or rail network, and lastly the additional cost of labor, particularly in skilled-trades which usually must be filled by an itinerant workforce from elsewhere.

This is not only the experience of civilian and public construction projects, but also of the oil industry, which faces similar challenges and cost factors when establishing and maintaining operations in the Arctic.

1973 - Nuiqsut as a tent city

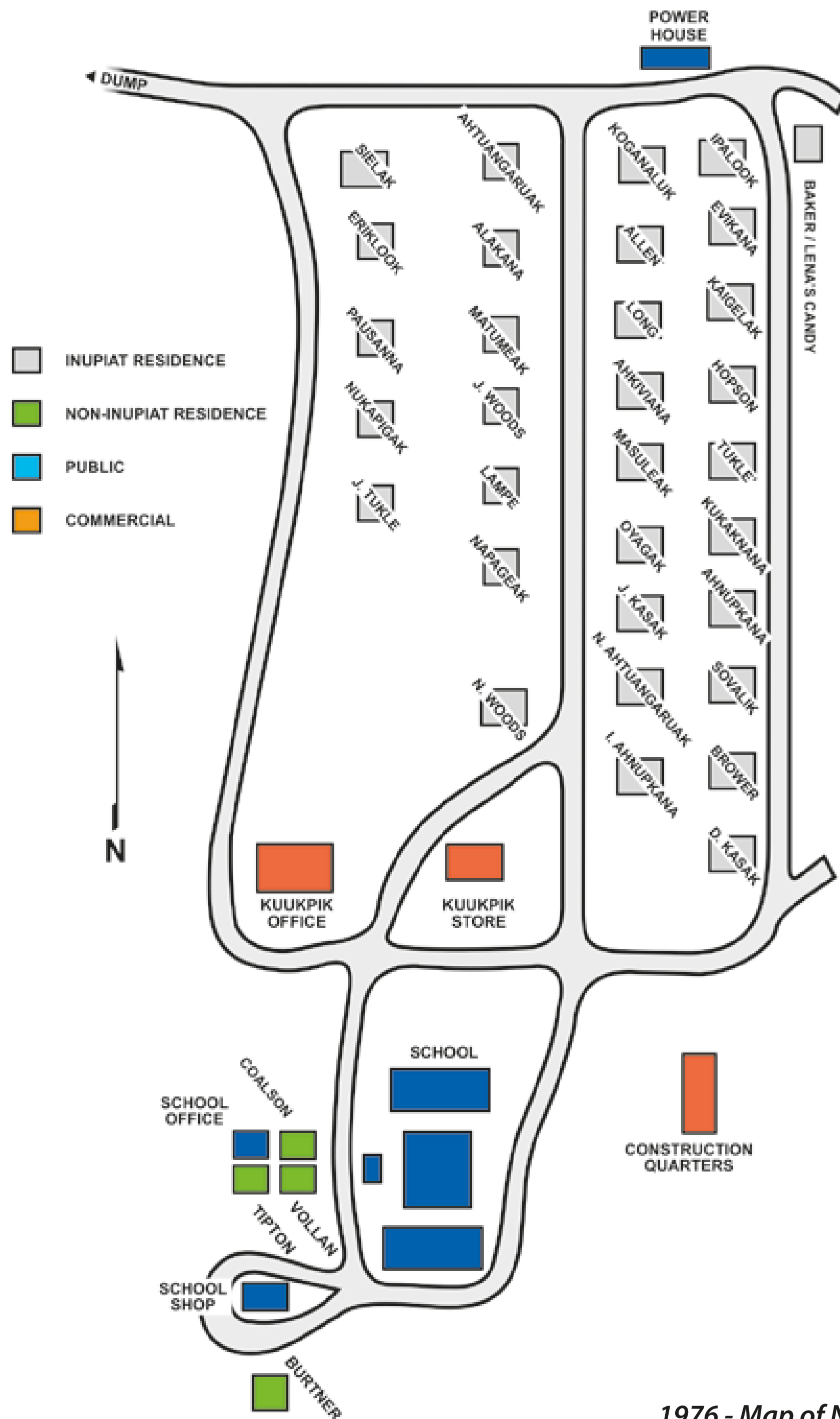
Notwithstanding these factors, the $33,498,764 capital investment by the North Slope Borough in the establishment of Nuiqsut between 1973 and 1981 (a figure that has grown considerably in the years since), represents 8.47% of the NSB Capital improvement fund appropriations for that period, amounting to a cost of around one-million dollars per original household.

By 1976 the City of Nuiqsut had taken form and the original settlers were all housed. The village comprised 31 houses for Iñupiat families, 4 houses for non-Iñupiat accommodation (school teachers), several school buildings, a general store operated by Kuukpik Corporation, the corporation office and health clinic and the first small power generation facility to the north of the houses. There was also a small camp to provide accommodation for the itinerant construction labor that was involved in the capital improvement program.

When one today asks residents of Nuiqsut, who were among the first settlers in 1973 and the decade following about their most happy memories, the answer in invariably about those first years. Though lacking in comfortable homes and public services, the community was united and contented. It was the period in the history of Nuiqsut in which the residents lived most closely according to the egalitarian idea of Iñupiat society. They had to work together to survive, and they faced common challenges, common rewards as they pursued common goals.

During the first decade, they were “in the same boat”, and on equal terms, as almost everyone was Iñupiat, was a shareholder of both Kuukpik Corporation and ASRC and related by blood or marriage to the others.

Their village was young, and so were its citizens, more than half being under the age of 21. They shared a clarity of purpose and they were generally united in support of their leaders, the elder parents, uncles, aunts and grandparents who had established the village and on whose subsistence skills and traditional knowledge they were to depend.



1976 - Map of Nuiqsut
showing the first 31 houses and other buildings
Source = Trapper Tracks - Nuiqsut School Yearbook 1975-75 (Redrawn for this study)

The early years of Nuiqsut

In the decade following 1973 and the resettlement of Nuiqsut, the first signs of a conflict between the traditional subsistence way of life and the modern cash economy financed by oil wealth was already becoming evident. From previous studies and documentary evidence, as well as our own knowledge of the community and interview testimony collected since 1997, it is clear that the villagers who founded Nuiqsut did so with the idea not only of leveraging further Iñupiat land ownership under ANCSA, but also out of the desire to follow the traditional Iñupiat subsistence lifestyle.

As much out of necessity as of ideology, the new Kuukpikmiut had to harvest a major proportion of their nutritional needs from the land.

During that first decade, Nuiqsut was probably the Native community on the North Slope in which subsistence food accounted for the greatest part of the daily diet, just as the villagers here used as much if not more time occupied with their subsistence activities.[20]

[20] Sverre Pedersen, Subsistence Study ADF&G 1979 and 1984

The residents of tent city had to work hard and help each other - most freight was moved by sled and ski-doo

The Iñupiat language, Iñupiaq, flourished. The older generation used it as their primary language, thus the younger generation were exposed to it every day. Together with traditional songs and dances, stories and crafts, the language was a living embodiment of the Iñupiat culture, including as it does a vocabulary that is well suited to describe the natural world of the tundra and to evoke the traditional spirit and values of subsistence life. Though never conceived as such, Nuiqsut seemed to be a promising social and cultural experiment, especially when compared to the way that the indigenous cultures were suffering in other parts of the Arctic, including Barrow, from where most Nuiqsaġmiut had come.

ANCSA was not the harbinger of cultural decline and assimilation in Native Alaska. That process had begun over a century earlier. Yet in the years immediately following ANCSA, the understandable ambition of the new corporations and municipalities to modernize their communities unleashed a boom economy and an influx of people, ideas and values from the outside, for which the Iñupiat were unprepared. This situation existed throughout Native Alaska, but it was on the North Slope, where oil revenue and new employment opportunities appeared so rapidly, that the socio-cultural impact was perhaps most noticeable.

Soon after ANCSA and the formation of the borough municipality, the prospect of oil revenues made it possible for the North Slope Borough to raise funding for capital improvement through the issue of municipal bonds, thus enabling the borough to implement capital improvement programs quickly. With few skilled engineers and managers within the Iñupiat community, the borough had to rely on outside contractors and itinerant labor, leaving the unskilled construction jobs, most of which would be temporary or seasonal, to the local people. The massive flow of construction projects that followed created many job opportunities, particularly for the men.

One cannot look back and blame the Iñupiat leadership for implementing capital improvement programs that were sorely needed to bring modern conveniences and living conditions to the villages. Neither can one criticize the leadership for setting the goal of creating as many jobs as possible for their own people.

Butchering a seal in the early days of Nuiqsut

These were noble goals which are as justifiable today as they were forty years ago, despite the fact that the pursuit of these goals does imply some conflict between traditional and modern values.

Paid employment in the construction industry and the growing public sector produced a sudden abundance of cash in the communities, an economic boom, which in many ways resembled the abundance of subsistence resources in which communities from time to time could rejoice.

Unlike the seasonal abundances of meat or maktak that traditionally would be saved for a winter of possible scarcity, the economic boom resulted in an economic free-for-all, often at public as well as private levels where little money was saved and that which was spent, was sometimes not spent wisely. This process had begun before the resettlement of Nuiqsut, and many of those who moved back to the Colville Delta have said that they did so, partly out of a desire to escape the worst impacts of the cash economy elsewhere; the rise in alcoholism and substance abuse with the inherent increase in domestic violence, child abuse and suicide, coupled with a gradual loss of traditional values and the stress of combining a subsistence lifestyle with a life in the cash-economy.

The subsistence lifestyle requires that the hunter is ready to hunt when the season, climate and other conditions are right. The industrial culture requires employees to commit themselves to a regular work schedule. Commitment to employment implies not only less time for subsistence activities, but also less flexibility in deciding when to hunt and who to hunt with. Like other Alaskan Natives, the Kuukpikmiut now had to face the challenge of living in "two worlds with one spirit".

Residents' testimony from the first years in Nuiqsut emphasize the joys of a united and homogenous community, where simple pleasures such as celebrating birthdays, anniversaries, the fourth of July and the first anniversary of their arrival in Nuiqsut are remembered fondly, despite the fact that such occasions took place under harsh and primitive conditions under the open sky. Today, many villagers remember how happy they were in the seventies to have left the stress and worry of modernization in Barrow behind them.

The North Slope Borough and ASRC honored their responsibility to the villagers of Nuiqsut and ensured adequate funding to establish their village and to bring the living standards of the Kuukpikmiut in line with the growing standard of living and social welfare across the North Slope. Yet in implementing a capital improvement program that within eight years would inject over 35 million dollars into Nuiqsut, they also ensured that the same challenges that were being faced in other North Slope communities would soon be felt in Nuiqsut.

During the same period, the oilfields continued to grow - first in Prudhoe Bay and with the construction of the Trans Alaska Pipeline, later with the move westward from Prudhoe Bay to the Kuparuk River oil field. Oil development provided more than tax revenues for the North Slope Borough, it also provided employment by the oil companies and their many contractors, several of which were already owned by Native corporations such as ASRC.

The impact of paid employment and tax revenues were not the only impact on Native communities such as Nuiqsut.

While the Natives welcomed the benefits of the cash economy and employment, they would soon discover that the mere presence of the oil industry and its facilities on the tundra had changed the nature of their subsistence lifestyle. Nuiqsut was the first, and so far the only, community affected in this way, because the oilfields were so close to the village. Although the sixty miles from Nuiqsut to the western sector of the Prudhoe Bay field might seem a long way, it was still close in terms of the distances and areas covered by subsistence hunters.

At Prudhoe Bay, Native hunters had been prohibited from hunting within the oilfield. With the development of the Alpine oilfield there were no such blanket prohibitions against hunting – apart from guidelines against the use of firearms within certain safe distances of pipelines and facilities. Yet, as the oilfields expanded westward into the Colville Delta, the Iñupiat no longer felt welcome in these areas of their own land.

This was not a simple question of legal rights or hunting practicalities, it was a challenge to their identity as subsistence hunters, accustomed to travel in pursuit of the wildlife for hundreds of miles without meeting anyone but their own people. But it was also a practical issue. Subsistence hunting, especially when carried out by individuals or small groups, requires an understanding of the land that can take a lifetime to acquire, and which in turn can take a lifetime to pass on to the next generation.

Although the tundra of the Colville Delta covers millions of acres, some areas support more subsistence wildlife than others, and some areas, even though they might be rich in subsistence resources, may remain untouched for a generation or more, simply because no one has yet lived the lifetime required to learn how to hunt and survive there. Nuiqsut lies on the west bank of the westernmost major channel of the Colville Delta. It was natural for the original settlers to begin their process of acquainting themselves with their new lands to venture first northwards to the ocean, eastwards across the delta and southwards up the Colville River, because these were the territories they had learnt most about from their forefathers, and these territories were those most accessible given the means of transport available in the early years of Nuiqsut.

The Colville River and the delta to the north and east were also the most obvious sources of wildlife, particularly the migratory caribou on which the Iñupiat depended for so much of their meat.

The Iñupiat have strong spiritual feelings about their land, feelings which embrace both traditional Native spirituality and the more recent Christian ideas. Many Nuiqsut residents, of all ages, describe the tundra as a gift, a paradise, a rich Iñupiat garden with which they are blessed. It would be a mistake to interpret this as empty rhetoric, it is a deep seated love of and dependency on the land and nature's wealth that defines the Iñupiat world. Having lived on this tundra alone since time immemorial, any change or encroachment by outsiders is perceived as something incompatible with their ancestral universe.

Within a decade of resettlement, as the hunters had begun to know their lands to the east and teach their children where and how to hunt, the development of the Kuparuk Oil field some 30 miles to the east was under way, the lights of drilling rigs and production facilities visible in the night sky. The oil industry and the world that it represented for the Iñupiat was coming closer to their village. The villagers were concerned about the growing activity and the new oilfield structures such as pipelines on the tundra, and how these might impact the wildlife and their subsistence hunting. They were also concerned about their children's future - many adults realizing that having come to Nuiqsut late in life, they had less years in front of them to teach their children the skills necessary to survive in these new lands. Many were quick to begin exploring the subsistence resources to the south and the west, and the general consensus quickly became that oil development to the east would impact their subsistence lifestyle.

Prudhoe Bay - here, where the Inupiat before had the tundra to themselves, they were becoming surrounded by industry

NUIQSUT VOICES

LEONARD LAMPE
Original 1973 settler
Kuukpik Corporation Board Member
Previous Mayor of Nuiqsut

"I grew up learning to hunt on the east side, and as the Kuparuk oilfield expanded westward towards Nuiqsut, I was concerned about how it would affect the animals and where I would teach my children to hunt. I took a stand on this when I became mayor in the nineties, but as the years passed, I learnt from our elders that the birds and the fish and the wildlife were still coming, and we could still hunt. But as a Native, it's your natural instinct to stay away from structures, pipelines and development when you are hunting."

In the first seven years of the new village, the community remained predominantly Iñupiat, with few permanent non-Iñupiat residents. Similarly, the majority of the population were shareholders of Kuukpik Corporation and members of the federally recognized tribe, the Native Village of Nuiqsut (NVN). In 1975, in compliance with Alaska municipal law, their village was also incorporated as a second-class city, giving Nuiqsut its own municipal status.

By the time that Nuiqsut was incorporated in 1975, the population of less than 200, of whom approximately half were under the age of 18, was saddled with a multitude of entities to represent their interests. As founders of the village, most were Kuukpik shareholders, their village corporation was the custodian of the land and compensation awarded under ANCSA and would become the locomotive for development in the future.

To exert their rights as Native Americans their membership of the tribal village (NVN) would be vital, not least because the federal government recognized the sovereignty and autonomy of the tribes in ways that, at that time, the State of Alaska did not. The tribe could become a vital avenue for securing funding and support from federal programs, as well as recognizing the rights of Kuukpikmiut to manage many aspects of their lives that in urban America otherwise fell under state, federal or city jurisdiction. They also had a municipality and a city council, enabling them to operate a city government. Under Alaska law, election to the city council would be open to all residents, regardless of their ethnicity, but given the predominantly Iñupiat composition of the village at that time, this posed no problem.

Managing and harnessing the potential of these three entities, together with maintaining a representation and a relationship with both the North Slope Borough and the regional corporation, ASRC, on which Nuiqsut was particularly dependent for financial support, was a strain on the manpower resources of a community comprising only a hundred or so adults, all of whom were heavily occupied building their village and maintaining subsistence activities.

It was only natural that the community found its leaders for all three entities amongst the same limited pool of elders and hunters, according to the same values and traditions that governed the leadership of the whaling crews. In the early years it was common for the City mayor and the leader of the village corporation to be whaling captains, and the membership of the city council, the corporation board of directors and the tribal council was typically filled from the same pool of leaders, a tradition that continues to this day.

While obviously an administrative and personal burden for the leaders, who had to manage these entities and serve their community in the early years, it was not a task that involved major ideological or political conflicts, because, to begin with, the people whose interests these entities represented were essentially the same. At this time, the community saw each entity as a legitimate tool for redistributing the wealth that came from ANCSA, the Borough, and the oil industry.

In the late seventies, following a deal by which Kuukpik Corporation sold its nearby gravel mine to ASRC, Kuukpik Corporation assumed the $2 million mortgage debt for the initial 31 houses from the North Slope Borough that the residents were unable to pay themselves. With most residents being shareholders, such an economic intervention by the corporation was natural.

The leaders of the community in the late seventies were aware that their endeavor to establish a new village required more than human effort. They also needed a cultural strategy, that would define how the Kuukpikmiut would maintain sovereignty over their lands in the face of the industrial development which eventually would come, at the same time as protecting their subsistence way of life.

With the support of the North Slope Borough and external social scientists, they produced Nuiqsut Paisanich – Nuiqsut heritage, a cultural plan[21] for the community of Nuiqsut.

Nuiqsut Paisanich summarized the historical claim of traditional use and occupancy of the Kuukpikmiut to their lands in the Colville River delta, including the many ancient settlements, campsites and traditional burial grounds that existed in the region and that had underpinned the Kuukpikmiut lands claim and their right to establish Nuiqsut as a new village. Nuiqsut Paisanich also formulated a plan for the development of the community and the cultural, political and social initiatives necessary for the future, with a clear focus on the maintenance of subsistence, traditional values and customs and the protection of the land.

[21] Nuiqsut Paisanich – Nuiqsut heritage, a cultural plan, Prepared for the village of Nuiqsut and the NSB Planning Commission and Commission on History and Culture by William E. Brown, Arctic Environmental and Data Center, February 1979

Nuiqsut 2015 above the bluff where 40 years ago the citizens lived in tents

Nuiqsut Paisanich was, and still is, an important document for the Nuiqsaġmiut. In later years, it would serve as a reminder to villagers and outsiders alike, of the ideas and goals behind the resettlement of Nuiqsut. At a time when the community was heavily occupied with the creation of a physical infrastructure and the buildings, homes and public services that would become Nuiqsut, it was important to reaffirm the traditional values on which the resettlement of the village was founded.

In the eighties the situation in Nuiqsut began to change. With the initial capital investment projects almost completed, the community had housing, a small general store and a new school. There was a power plant to generate electricity, and a tank farm, operated by Kuukpik Corporation, to provide diesel oil for heating the homes. Like all North Slope communities, sanitation remained primitive, with the exception of the new school, which had flush toilets, the houses and other buildings relied on honey buckets[22] that were emptied each week into a communal sewage lagoon outside the village.

The village corporation, Kuukpik Corporation, was facing financial difficulties, having spent most of the compensation funds from ANCSA and having subsidized housing and many community services and cultural initiatives, as well as operating the fuel depot and village store, neither of which were ever profitable. This was the case in many Alaskan Native villages, where the leaders of the community tried to use the corporation as a vehicle for improving the lives of their citizens, though without the economic ballast of major business revenues with which to fund operations.

Although villagers and visitors alike talked of a future oil wealth, no one in Nuiqsut expected a sudden abundance of money from the oil industry nor the changes that oil revenue would bring about. The focus for survival remained on subsistence.

Through the paid employment of the capital improvement projects and other work in the nearby oilfields, many villagers had enjoyed some of the material benefits that other citizens in urban Alaska took for granted. For villages like Nuiqsut, such benefits were still comparatively expensive.

By 1981 24% of the original settlers had left Nuiqsut. Today, thirty-five years later, it is hard to speculate why so many left. Many moved back to Barrow, or moved elsewhere in the state where living costs were lower, public services were better and living conditions less harsh. Perhaps they had earned enough money on construction projects to be able to afford a new start elsewhere, perhaps some left to get married and set up home in other villages. As Kuukpik shareholders, they had little expectation, at that time, of harvesting regular large dividends from their corporation, and even if they left Nuiqsut and Kuukpik Corporation later became wealthy, they would still be entitled to their dividends. Although approximately 43 of the original settlers had left the village, the population in the eighties continued to grow and approach 300 as the following table illustrates.

TOTAL POPULATION OF NUIQSUT 1973 - 1983
(Galginaitis et al, 1984)

		Iñupiat		Non-iñupiat		
Date	(note)	Number	%	Number	%	Total
04/1973	(a)	176	100.0	0	0.0	176
1974	(b)					145
1977	(c)					157
1980	(d)					208
07/1981	(e)	214	99.5	10	4.5	224
07/1982	(f)	262	87.0	39	13.0	301
11/1982		227	83.0	44	16.2	271
01/1983		239	86.0	39	14.0	278
02/1983		215	84.3	40	15.7	255

a Reconstructed founding population (176 in list of settlers)
b University of Alaska study
c North Slope Borough data
d U.S. Census
e Subsistence Division Alaska Dept. of Fish & Game
f Alaska Consultant for North Slope Borough

[22] A primitive version of the chemical toilet used in mobile homes and boats, the honey-bucket remained the most common form of toilet in the North Slope villages until the mid 2000's. Many Alaskan bush communities continue to rely on honey-buckets.

The late Ruth Nukapigak, one of the original settlers, preparing maktak outside her house in Nuiqsut, 1999

There is some uncertainty about the accuracy of the above data as it is based on different censuses and studies that were undertaken for very different purposes - some studies only counting those persons who were resident in Nuiqsut on the day of counting. But the overall trend is somewhat indicative of the population change in this period. This data tells us several things:

The number of original settlers resident in Nuiqsut had fallen from 176 to approximately 134, while the total population had increased to between 200 and 300 by the early eighties.

While some of the Iñupiat who moved into the community in this period may have already been Kuukpik shareholders who had remained in Barrow and other villages, it must be assumed that most newcomers were not enrolled in Kuukpik Corporation. Some of the additional number are of course children of original settlers who had been born since 1973. These would not have been Kuukpik shareholders, though many would have stood to inherit shares when their parents had passed on.

From the start of the eighties, a number of Non-Iñupiat were resident in the village. These were mostly outsiders who moved to Nuiqsut to work, such as teachers and administrative staff, few of whom have remained for many years. During their residency in Nuiqsut, they had enjoyed, as US citizens, equal representation and the right to stand for election in the City Council, the only village entity membership of which is not limited to the Iñupiat.

While most of the Iñupiat citizens would continue to be in a household that included one or more Kuukpik shareholders, and thus could expect to receive some benefit when Kuukpik began to pay dividends to shareholders, the percentage of residents that were Kuukpik shareholders had fallen from 100% in 1973 to an estimated 48% in 1983.

The number of non-Iñupiat in the community had, by 1983, risen to approximately 15% of the total population - which implies that perhaps 20% of the adult population that would be entitled to vote in City affairs.

Houses built in the late seventies and eighties photographed in 2013

The interesting aspect of studying - in 2014 - this period of Nuiqsut in the seventies and eighties, is that it provides strong evidence that indicates that much of the structure and dynamics of the community, as it is today, is the result of factors unrelated to the development of the Alpine oilfield, and that the socio-cultural impact of change was already evident in the mid eighties - a decade before the discovery of Alpine.

In less than a decade, the new community of Nuiqsut had changed from being a cohesive group of Iñupiat with similar circumstances and prospects, to being a community comprising several groups of citizens whose circumstances and prospects would differ to some degree. Although the community continued to be characterized by kinship ties and a common commitment to the subsistence lifestyle and the Iñupiat culture, the seed of division on economic, political or personal lines was already sown by 1983.

One cannot blame the leaders of the past 40 years for most of this situation. The construction of ANCSA was not of their choosing, nor was the sudden creation of several parallel democratic or corporate entities, both within the village and across the wider North Slope region, that would have overlapping, and in some cases conflicting, interests. It is this construction with which the villagers have had to work for forty years, and which today's community leaders are still working to adapt and form to meet the changing needs and circumstances of Nuiqsut.

By the time of the first socio-cultural study of Nuiqsut in 1984[23] , the divergence of interests between the villages entities was evident in several ways. While in the first years of the City Council and Kuukpik Corporation, the two entities were widely perceived as being one and the same, by 1984 the interests of the two were often divergent, and the membership of the Kuukpik board and the City council had become more distinct, though the tradition for elected officers of each being selected from the same small pool of village leaders, whereby some would serve first a period on one board, before retiring and becoming elected to the other, would continue to the present day.

It took several years for Kuukpik Corporation to complete the conveyance of land to the city that was required under ANCSA and with the foundation of the City.

In the same period, there were protracted negotiations between Kuukpik Corporation, the City and the North Slope Borough regarding the sale of Kuukpik land to the borough for the construction of houses. Kuukpik Corporation, seeking to secure the best price for its shareholders, sought a higher price than the borough was offering, while the City, representing many citizens who desperately needed housing, argued for a price that would make the subsequent mortgage payments realistic for the new homeowners. For several years the community was divided on this issue, as the interests of shareholders and residents were no longer strictly identical.

According to the 1984 study, ***"the development of Iñupiat institutions faster than the development of Iñupiat leaders to operate them is a fundamental problem, put another way, the imposition of non-Iñupiat institutional forms on the Iñupiat before the development of enough trained Iñupiat to adequately man them creates a need to rely on non-Iñupiat experts"*** (Worl, et al, 1981:186).

This challenge applied to the employment of teachers, maintenance staff and various managers. While some villagers argued for a school that would be essentially Iñupiat, to reinforce Iñupiat values and knowledge, others argued for a predominantly non-Iñupiat school, where their children could be given the education necessary to compete and integrate with the outside world, the skills and expertise of which they considered would be necessary, also in the village, in the future.

Given that education is the responsibility of the North Slope Borough School District and subject to both state and federal laws regarding the educational curriculum, the latter view prevailed, resulting, in common with other North Slope village schools, in a school that for the past 30 years has been almost totally dependent on non-Iñupiat (and non-Iñupiaq speaking) teachers and a curriculum that in many ways is perceived as foreign to the community and its subsistence culture.

[23] ibid Galginaitis et al 1984

The employment boom which began with the borough capital improvement programs in the seventies began to tail off in the eighties, though the creation of the city and the establishment of village infrastructure such as roads, school and utilities did go some way to offsetting the decline in construction employment, as permanent and seasonal jobs became created in various village entities.

In the same period, many villagers, mainly males already with experience of the construction industry, found work in other parts of the North Slope, especially in the oil industry at Prudhoe Bay and Kuparuk, where ASRC and other Native-owned corporations now had active operating ventures that offered Native preference for employment, supported by the "minority-hire" programs of the oil companies.

Here, the first signs of the inherent conflict between subsistence activities and paid employment began to be evident, as some villagers, occupied by employment, had less time to spend on subsistence activities, and thus, less time to harvest subsistence resources that could be shared with family members or the community and to pass the younger generation their hunting skills.

The income from employment did however enable some villagers to invest in vital equipment for their subsistence activities such as boats, outboard engines, four-wheelers and snow-machines - all of which made it possible to hunt farther away from the village easier and in less time. Within a decade, the pattern of subsistence would change from hunting trips that lasted many days or weeks to hunting trips that, with the aid of motors, could be undertaken in a few hours or days, even alongside regular employment.

That the Iñupiat managed to articulate subsistence with the cash economy cannot be denied, but articulation came at the price of having to pursue both ways of life within the same limited timeframe. The greatest impact of this development was perhaps on the children, for whom subsistence activities traditionally had meant spending long periods of time away from the village with their parents, siblings and elders. These were times when families spent a lot of time together, not only hunting and working, but also sharing their experiences, knowledge and traditional stories, all of which were important for the maintenance of the language and culture.

Houses built in the eighties photographed in 2013

This development would also come at a time when the outside culture, via television and video, would gradually reach Alaska's village communities, providing new cultural impulses to the young generation.

With the growth of the cash-economy and increased contact with outsiders, including those working in the community for longer periods of time, came an increase in both alcohol consumption and substance abuse. From the early years of the city, Nuiqsut had voted to be a dry community, in which the import and consumption of alcohol within the city limits was banned, yet the availability of alcohol and drugs continued to grow in proportion with the economic ability of the community to purchase them.

Regular employment also meant the economic ability to leave the village and travel to cities such as Fairbanks and Anchorage, where alcohol was cheaper and more freely available.

The trends in Nuiqsut during the eighties and nineties mirrored the trends evident in small communities throughout the Arctic and would become a major social challenge in the coming years.

The majority of employment opportunities were in the construction industry, outside the village, seasonal in nature, and taken primarily by the men. Language and educational barriers prevented the rapid growth of permanent employment opportunities in the village, where dependence on non-Iñupiat labor was the norm.

Although Nuiqsut, with the creation of the City, was in many respects a rural American community in which anyone could settle and become part of the community, few non-Iñupiat ever made Nuiqsut their home. Such a trend had been actively discouraged by the local population, and by the structure of employment and home-ownership. Most jobs that are filled by non-Iñupiat are limited-service contracts (such as teachers), or (mirroring the employment pattern of the oilfields) jobs filled by more that two people, who alternate every few weeks and remain resident in other parts of Alaska or the US.

A satellite dish shares roof space with caribou antlers, Nuiqsut 2013

In this way, such employees rarely bring their family with them or move their home to Nuiqsut so their membership of the community is somewhat limited. As the primary land-owner in Nuiqsut, Kuukpik Corporation, and its Iñupiat shareholders, effectively control who may purchase land and build a home.

The demographic changes that had taken place since 1973 meant that by the mid eighties, Nuiqsut was already becoming a less homogeneous community.

Although many of the Iñupiat non-shareholders were "afterborn" of the original shareholders, there was also a growing number of Iñupiat who had moved to Nuiqsut, and who, without shares in Kuukpik Corporation, would have other ideas about how the village should develop. Though they had no voice in the village corporation, many would find a voice in the City Council and the (tribal) Native Village of Nuiqsut.

There was a growing concern amongst the Iñupiat residents that an influx of non-Iñupiat outsiders could shift the balance of power in the community, whereby Iñupiat might in the future not have a majority voice in the city council, where questions such as the prohibition of alcohol are decided. This concern seems to have been more related to natural fears and perceptions rather than any immediate trend, as the non-Iñupiat who become resident in the community for a longer period of time have had a tendency not to interfere in what they perceive as local, Iñupiat issues.

In the eighties the oil industry was moving closer in the Kuparuk River field, and the first licenses for exploration in the Colville Delta were issued.

While several scientific caribou migration studies did not appear to indicate changes in migration patterns, it was the popular perception in the village that oil industry was having an impact on the migration routes - not in a way that posed a threat to the caribou population, but which moved their migration routes further from the areas traditionally used by the hunters of Nuiqsut for subsistence hunting. As the villagers began to understand that oil development in the Colville Delta was a real possibility in the coming decade, they were understandably concerned about such an impact.

For some of the villagers, the resettlement of Nuiqsut had been a tough human endeavor. They had endured many years hardship before they could achieve the housing and modern infrastructure that they now enjoyed. That their gamble of claiming lands in the Colville Delta had given them a potential share in a future oil wealth was something they perceived as their right, and, subject to adequate environmental control, they were keen to see their sub-surface resources exploited. They wanted their share in the coming oil wealth.

Other residents were more reserved about oil development. They saw Nuiqsut as the last frontier of their subsistence culture, and they were reluctant to risk their ancestral lands and subsistence wildlife for an economic benefit that they feared would threaten their culture and only last for a few decades, after which they would still need to live by subsistence. While Kuukpik shareholders would have the most to gain economically from oil development on Kuukpik land, the division of opinion about development was not one simply between shareholders and non-shareholders. All Iñupiat were concerned about the impact of development on their lands and subsistence resources, and most hoped for some economic growth and benefits from the oil industry to their community.

Though exploration was under way, there was as yet no hard evidence in the late eighties that oil development in the Colville Delta would be economically viable. The major concerns of the community at that time related to the socio-cultural impact that had already arrived and was clearly evident in Iñupiat communities across the North Slope.

As we examine the first twenty years of Nuiqsut today, in 2014, what is striking is that so many of the concerns and impacts that residents of Nuiqsut describe today, were already evident long before the discovery and development of Alpine.

Alpine CD-4 seen through telephoto lens from Nuiqsut five miles away, 2013

The new era of exploration for oil on the North Slope which began in the sixties embraced a wide area, extending from NPR-A in the west to what is now ANWR in the east. That the first commercially viable discoveries were made in the Prudhoe Bay region on the banks of the Sagavanirktok River, dictated that Prudhoe Bay would become the bridgehead for the future oil development of the North Slope.

The necessity of the Trans-Alaska Pipeline System to move oil to market also made it logical that Prudhoe Bay would be the staging point from which North Slope oil would be pumped into the pipeline. Similarly, the only road connection between Fairbanks in the interior and the North Slope would be built as part of the pipeline construction project, with its ultimate destination being the Deadhorse camp at Prudhoe Bay, where two airstrips were also built, making Prudhoe Bay the hub for the North Slope oil industry.

It was therefore natural that the early exploration and development of oilfield infrastructure progressed outwards from Prudhoe Bay. As new oil pools were discovered the wells were gradually connected to a network of pipelines, through which oil would be pumped, first to nearby processing facilities, where the crude oil from the wells would be separated from the condensate, natural gas, water and a number of impurities such as sand, before being pumped on to Pump Station #1, where it would enter the Trans Alaska Pipeline and be pumped southward to Valdez.

While the North Slope oilfields also contain huge amounts of natural gas, and in some cases also condensate (natural gas in liquid form), there was no economically viable means of transporting these by-products to market.

The UGNU Discovery well 2 in the Kuparuk River Unit in 1997

While a small part of these hydrocarbon by-products could be separated and refined locally for use in power-generation within the oilfields, most of the gas is pumped back into the underground to maintain reservoir pressure and thus increase the amount of oil that can be extracted. [24]

[24] In fact, almost fifty years later, there is still no commercially viable way of moving natural gas from the North Slope, as the major potential markets for natural gas lie in the urban industrial centers of the lower-48 states, almost 3000 miles away. With the gradual and inevitable decrease in North Slope oil production and the growing need for home-produced energy in the US, the oil industry and the State of Alaska continue to explore the possibility of developing the huge natural gas resources of the North Slope, but so far no viable solution has been found.

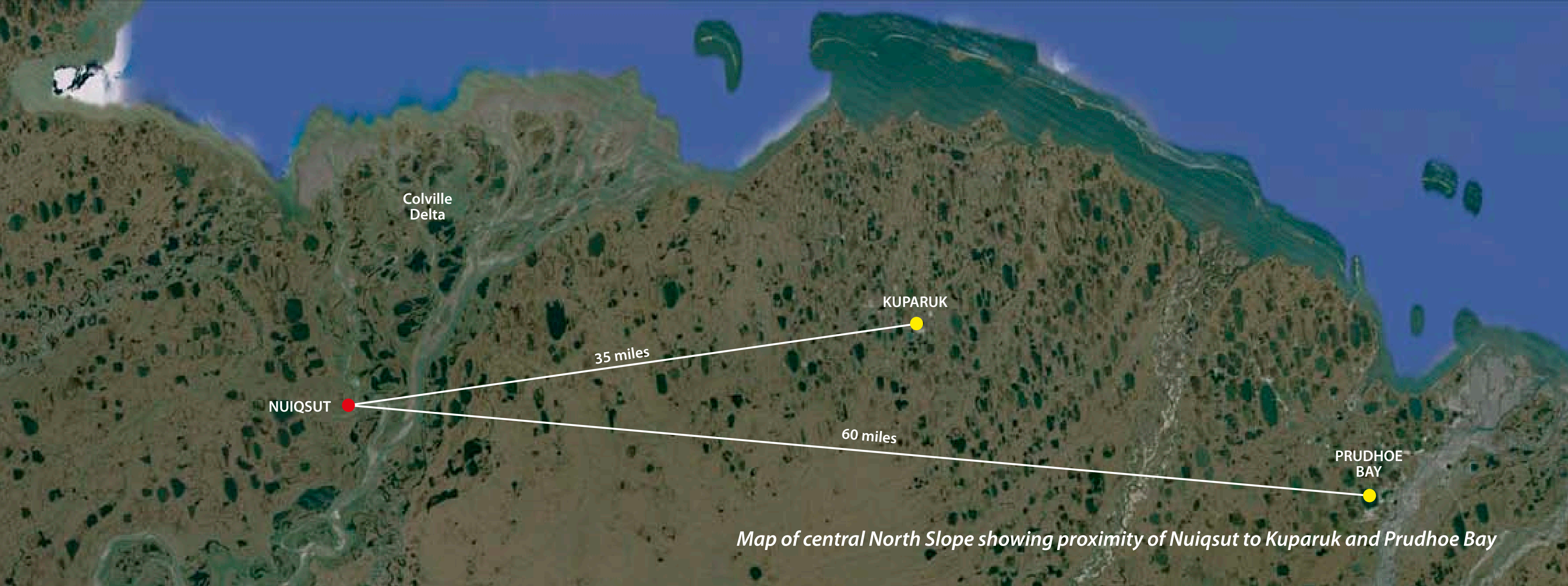
The Kuparuk River oil pool was discovered in 1969 at the Sinclair Ugnu No. 1 well, only a year following the discovery well at Prudhoe Bay. It would take twelve years before, in 1981, the first oil would be produced at Kuparuk. This delay was not only due to the logistics of delineating and developing the Kuparuk oil field and drilling additional wells, it was also dictated by the need to construct processing facilities and pipelines to tie the Kuparuk field in to infrastructure of Prudhoe Bay and the Trans Alaska Pipeline, which was not completed until 1977.

With the opening of the Kuparuk field and the completion of its processing facilities, the operator at that time, ARCO, continued exploratory drilling in the areas adjacent to Kuparuk, moving gradually westwards towards the Colville Delta. As is typical for most oil fields, the rate of production rises rapidly in the first years as wells penetrate the oil pool, as the initial reservoir pressure is high. Within a few years, the natural reservoir pressure, and thus the production rate of oil, falls.

Hereafter, the productivity of the field is maintained by drilling additional wells to find hitherto untapped parts of the reservoir, and by the use of water or gas injection, or enhanced oil recovery, to maintain reservoir pressure and permeability of the oil bearing rock. After eleven years, production in the Kuparuk field peaked in December 1992 at an average of 339,386 barrels of oil per day (BOPD).

Given the massive capital investment by ARCO in developing the Kuparuk oil field and its infrastructure, there were many economic and logistic incentives for developing satellite fields and exploring oil pools in adjacent areas, the eventual production of which could utilize the existing processing facilities, pipeline and road infrastructure and human resources of Kuparuk.

Preliminary seismic surveys in the late seventies and eighties indicated the potential of the Colville River Delta sub-surface as an oil reservoir. This was no surprise to the Iñupiat, whose forefathers had told of the presence of natural oil seepages on the tundra in the region. In fact the Kuukpikmiut had previously used oil-sodden peat as a source of heat in their primitive sod houses.



Map of central North Slope showing proximity of Nuiqsut to Kuparuk and Prudhoe Bay

Although most of the sub-surface of the coastal plain of the North Slope contains oil and gas, the reserves are not one single oil pool. The geology and stratigraphy of the North Slope is complicated, giving different oil pools at different levels underground in different places. This also implies that different oil pools were created in different geological era, resulting in widely differing chemical composition, reservoir pressures and temperatures between oil pools, and different quantities of gas and condensate, as well as impurities such as water. The different rock formations which host the oil, and the different reservoir depths also imply that different oil pools will produce different types and quantities of solid impurities which must be separated from the oil.

By the end of the eighties, ARCO was planning a series of exploratory wells in the Colville Delta, at which time the Kuukpikmiut and ASRC had, through ANCSA, achieved ownership of a major portion of the Delta lands. As the subsurface rights to this land were held predominantly by Arctic Slope Regional Corporation (ASRC) it was the regional corporation that entered into the first agreements with ARCO, so that exploration could go ahead.

The progress of exploration westward was slowed by the limitations imposed by the various environmental and planning regulations governing the Colville Delta.

Whereas Prudhoe Bay and Kuparuk were to a large extent opened up for development allowing the oil companies to build permanent roads to service and supply drill sites, the situation in the Colville Delta was somewhat different.

The large number of inland lakes and waterways, covering over 50% of the land area, and the seasonal flooding of the delta made the establishment of permanent infrastructure such as roads, pipelines and drilling pads more difficult. Similarly, the importance of the Colville Delta as a natural habitat and breeding ground for hundreds of species of wildlife, wildfowl and aquatic life, and also the importance of the area for subsistence hunting by the Iñupiat meant that the traditional approach to permitting and constructing a North Slope oilfield would be politically unacceptable.

Drilling at Alpine CD-1 in 1999

Exploration drilling went ahead in the early nineties, though access to drill sites was limited to the winter months when temporary ice-roads could be built to allow rigs, equipment and supplies to be moved .[25]

Until the early nineties, Kuukpik Corporation was a small village corporation, similar to most other ANCSA village corporations. In the years since 1973 the corporation had consumed most of its initial capital awarded under ANCSA, and had not yet established major business ventures which would support the corporation economically in the future. Kuukpik had some involvement in oilfield contracting companies through a joint-venture with other village corporations, and within Nuiqsut, Kuukpik operated a general store and a fuel depot, the latter to ensure that fuel prices in the village could be partially subsidized to offset the comparatively high cost of living in Nuiqsut. Yet without the prospect of revenue from its own land base, Kuukpik Corporation was struggling financially and was dependent on support from ASRC and the North Slope Borough.

[25] Through its subsidiary construction company SKW Eskimos (Now a part of ASRC Construction Holding Company, ACHC), ASRC became a specialist in the construction of ice-roads on the tundra, securing employment for many Native shareholders in oilfield construction projects.

With the advent of oil exploration drilling in the Colville Delta, the community of Nuiqsut could see that the future could bring many changes. By 1993, when the discovery of the Alpine oil pool was announced by ARCO, the villagers had lived for twenty years primarily by subsistence, and many of the economic benefits and employment opportunities that had accrued to other North Slope communities, particularly Barrow, had passed them by. The major benefit from pre-1990 oil income had come to Nuiqsut via the North Slope Borough in the form of capital investment programs, which, while giving the village the public facilities and utilities it needed, as well as employment during the initial construction phase, gave few permanent jobs in the longer term.

The community of Nuiqsut, through Kuukpik Corporation, accepted oil exploration in the Delta for several reasons.

Firstly, the village had a legal and moral obligation to allow ASRC to leverage its sub-surface rights to the land. Most of the original settlers of Nuiqsut came from Barrow and had strong kinship ties with the ASRC and Borough leadership, both of which organizations had supported Nuiqsut financially since 1973, and the continued support of both of which was vital, given the severe economic situation faced by Kuukpik Corporation in the early nineties.

Secondly, many of the villagers could see the potential benefits of oil development in the Delta, as it would require an agreement with Kuukpik corporation as surface owner, for access to the land. The late eighties and early nineties saw the beginning of a debate within the community, as the oil industry and state and federal agencies held many public meetings to present the case for oil development to the villagers of Nuiqsut. Even at this time, opinion in the community was divided, between those who supported oil development and those who saw the encroachment of the oil industry into the Colville Delta as a threat to their culture and subsistence way of life. Accepting exploration was also a way of determining the potential of the area before debating the costs, benefits and consequences which might divide them.

This division of opinion did not simply follow the lines of shareholders and non-shareholders as one might expect. While shareholders in Kuukpik Corporation had, potentially, the most to gain financially from oil development, because a land-use agreement with Kuukpik would produce corporate revenue and thus dividends to shareholders, the original shareholders were also the original settlers, who had close ties to the land and its subsistence resources. Likewise, the newcomers to Nuiqsut who were not amongst the original settlers from 1973, were also divided, some seeing oil revenue as an important benefit which would improve the lives of all villagers, whether they were shareholders or not, while others, having embraced the necessity of subsistence when moving to Nuiqsut, were concerned about the impact on their wildlife resources.

While Nuiqsut has been a permanent settlement for over forty years, the nomadic hunting patterns and land use traditions of the Kuukpikmiut continue to define the subsistence way of life. For today's Nuiqsaġmiut the "village boundaries" extend many miles beyond the city itself.

Unlike development debates in urban societies, in which the polarization of opinion often reflects a similarly polarized population, the situation in Nuiqsut was more complicated. It is true to say that while most villagers were willing to consider oil development under certain terms, most villagers were also concerned about the impact of development on the subsistence resources and the socio-cultural fabric of the community.

It is difficult to compare such a debate in an Iñupiat community such as Nuiqsut with similar debates in urban societies. In the early nineties (and in fact even today) such a small community had few organizations or political fora which had a clear and well defined position on the issues involved. Support for different opinions and ideas is governed more by kinship ties or divergence between individuals, than allegiance to clearly-delineated political or ideological views.

As previous studies have also underlined, the Iñupiat tradition of consensus implies that most villagers are reticent to express views strongly held, particularly when such views are divergent to the general consensus or the position held by those who have established themselves in leadership roles.

Although the shareholder proportion of the community had become somewhat diluted by the early nineties, it is clear that the leaders at the time were predominantly both original settlers and Kuukpik shareholders. It must also be understood, that although history had given Kuukpik Corporation a development role, this was not essentially how the majority of citizens of Nuiqsut, whether they were shareholders or not, perceived the corporation.

At that time, the community of Nuiqsut had three organizational democratic entities, each with both divergent and overlapping spheres of influence, interests and agendas, and each with its own statutory or cultural limitations. To make matters more complicated, most citizens were directly or indirectly involved in, or represented by, all three entities, so there was no clear polarization between the three.

As Iñupiat, almost all the citizens of Nuiqsut are members of the tribe – the Native Village of Nuiqsut (NVN). Native tribes in Alaska, as in the rest of the United States, are unique entities recognized by the federal government (and in recent years, most state governments) through which the governments' responsibilities to Native Americans are fulfilled. Besides recognizing tribal sovereignty, by which Native tribes can govern many of their own affairs as sovereign nations within the US, tribal status also enables the tribe to have access to federal funding for a wide variety of social, cultural and capital projects. As a non-profit Native entity with no non-native membership, the Native Village of Nuiqsut is particularly vocal on issues of tradition, culture and subsistence.

As citizens of the State of Alaska and residents in an incorporated municipality, all residents of Nuiqsut, Native and non-Native alike have access to and representation in the City Council, which has responsibility for a range of community affairs in the same way as municipalities in other parts of the US.

NUIQSUT VOICES

JOSEPH NUKAPIGAK Sr.
Original 1973 settler
Kuukpik Corporation Board Member
Previous President of Kuukpik Corp

"My dad, he told me one time, 'Hey son, by working with the oil companies than instead of arguing with them, then you will receive benefits. And by working with them, you will make them understand the importance of our culture, and our way of life.

If they embrace those things, then by working with them, then things like these will be more easier for you in the future.' And I think that is true today."

Like the NVN, the City of Nuiqsut is a non-profit entity and thus excluded by municipal law from engaging in business ventures.

In 1973, most if not all Iñupiat settlers in Nuiqsut became members of Kuukpik Corporation. As the legal custodian of the land and capital awarded to Nuiqsut under ANCSA, Kuukpik Corporation is more than a business entity, it is the entity which embodies the historical claim of the Kuukpikmiut to their ancestral lands and natural resources as well as their aspirations for some degree of local self-determination. It is perhaps this aspect of Kuukpik Corporation's identity, rather than the corporation's more obvious business goals, which made Kuukpik the primary locomotive for development in the community.

Certainly, in the years since the establishment for the Alpine oilfield, as the economic potential of the village corporation has been realized, the revenue that Kuukpik generates for the community, both as dividends to shareholders and a whole range of benefits to the community at large, has cemented Kuukpik Corporation's position as the driving force in Nuiqsut.

While the subsequent corporate success of Kuukpik Corporation may not have been clear to the residents in the early nineties, there was broad agreement in the community that oil development was coming to the Colville Delta, and that, even with the Kuukpik surface land ownership, there would be little that the community could do to prevent it.

Two of the most respected community leaders at this time were Thomas Napageak Sr. and Edward Nukapigak Sr., both of whom were heads of household for large families that had settled in Nuiqsut in 1973, and both of whom were accomplished and respected whaling captains. Though both have now passed on, their many descendents continue to be prominent in village life, these families having provided mayors, corporation presidents and board members for forty years. It was Edward Nukapigak Sr, encouraged his children to explore ways of working with the oil industry to ensure benefits for the community.[26]

[26] From television interviews with Joe Nukapigak, 1999 and Joe Nukapigak & Isaac Nukapigak, 2013

Such was the prevailing wisdom of the elders in the early nineties. They were not blinded by the prospect of oil wealth, but they recognized the inevitability of oil development, as they recognized the need for their community to secure influence over development, to protect the subsistence environment.

Like most parents, they also had a dream of securing for their children some benefits and a higher standard of living than that which they had grown up with. These were respected leaders in the community, and their endorsement of supporting oil development, albeit with many concerns about the practical details, carried a lot of weight in the village.

Therefore most villagers, regardless of their shareholding status, saw Kuukpik Corporation as the only viable organization through which their aspirations for a better economic future and the control of their subsistence resources could be realized.

By 1994, when the Alpine oil discovery was announced, Kuukpik shareholders were no longer an almost absolute majority in the village. Newcomers, and the afterborn of shareholders, had changed the balance to roughly 50/50. The actual ownership of shares in Kuukpik Corporation was not the principal issue in the community at that time. There was broad agreement that Kuukpik Corporation was the only viable entity which both had the legal power (as custodian of the land) and the ability to engage in business negotiations with the oil industry.

The community leaders at the time were wise enough to understand, that to achieve success and the continued acceptance of the community, the corporation must embrace more than its simple goal as a joint-stock company of producing profits for its shareholders. To succeed, Kuukpik Corporation would embrace the interests and aspirations of all Nuiqsaġmiut, and channel some of its coming wealth to initiatives that would benefit the community as a whole.

There were powerful forces in both the state and federal agencies and the oil industry that advocated the development of the Colville River Delta oil reserves.

The leadership in Nuiqsut were also wise enough to learn by the experience of other Alaskan Native rural communities, where outside agencies and industry historically had adopted a “divide and conquer” strategy of pitting community entities against one another to secure the best possible terms for development as they themselves perceived.

The leaders in Nuiqsut knew, that promoting their own terms for development against the ideas of state and federal agencies would require that they stand together, otherwise the fiscal interests of state or federal government might prevail over the interests of the citizens of Nuiqsut.

The Iñupiat leaders had their wisdom and their inherent respect for the land, and they could begin to see the scale of the challenge before them. They had an idea of what they wanted to achieve, yet their corporation, which was to become the vehicle for their intentions, was poorly prepared for the task. Meanwhile, ARCO was preparing to develop the new discovery in the Colville River Delta, an oil pool which now had a name – Alpine.

After twenty years of struggling to establish their village on the bare tundra, and having proven that they could do so primarily on the basis of their Iñupiat subsistence way of life and values, the Kuukpikmiut were faced with a window of opportunity which they must exploit before development overtook them.

Public meetings between the oil industry and the villagers are regular events in Nuiqsut

Prior to 1993, Kuukpik Corporation had established business operations, mostly with joint ventures gaining contracts for the North Slope Borough on local capital improvement projects. Besides this, Kuukpik operated the village store and a fuel depot, neither of which had ever shown a regular profit.

It was from these humble beginnings that Kuukpik Corporation made its start in the business world, but the organization was unprepared for the scale of the business challenge heralded by the advent of the Alpine oilfield.

Like many village and regional corporations, Kuukpik had hired non-Native managers and other professionals to help them establish their businesses. Similarly, most Kuukpik business operations began as joint ventures with other established non-native contracting companies, which already had their own management and employees.

For some periods in the eighties and early nineties, Kuukpik Corporation employed non-Native management professionals who resided in the village, but the early results were far from successful and the corporation was still struggling to find its role in the village and balance the interests of business and community, as the 1984 study explained:

The Kuukpik Corporation and the North Slope Borough provide most of the employment in Nuiqsut. The Kuukpik Corporation cannot be considered merely an economic entity, however. Kuukpik Corporation is as much political and ideological as it is economic. Its board, employees, and shareholders (listed in order of active interest shown in the day-to-day affairs of the Corporation) are by no means in agreement on all things. There are too many cross-cutting loyalties. As a separate economic entity, the Kuukpik Corporation's interests cannot be the same as those of the city of Nuiqsut government, the North Slope Borough, or the Arctic Slope Regional Corporation. At the same time, cooperation with all of these bodies is necessary. These governmental economic bodies are the main political arenas. This is understandable, as the corporations control to a great extent what the governments feel they are mandated to regulate and distribute, as well as individual access to resources. Such conflicts were inherent in the Alaska Native Claims Settlement Act, and it is no wonder that village corporation shareholders who also are regional corporation shareholders and residents of a particular village and the North Slope Borough are sometimes bewildered trying to sort out what alternative action(s) benefit(s) them most. That the most common response is withdrawal or inaction should be no surprise.[1]

[1] ibid (Galginaitis, Change, MacQueen, Dekin, Zipkin et al). pp. 162-163

A turning point in the life of Kuukpik Corporation came with the appointment in 1992 of Lanston Chinn as General Manager. Chinn had worked for many years as a City Manager in the Bristol Bay region of South West Alaska and had a keen understanding of rural Alaskan life and Native politics. He had also experienced Native communities in other regions trying to come to terms with the post-ANCSA development years. Chinn moved to Nuiqsut and immersed himself in the community and its way of life, bringing his management expertise and flair for doing business to Kuukpik Corporation, and gradually establishing the trust of the Native leaders as he guided them towards applying their traditional Iñupiat leadership skills to the world of business. His appointment was be the start of a working relationship that would last to this day.

One of the first questions that Lanston Chinn addressed was how the village entities would arrive at a consensus and how the community would deal with outside agencies. Before the many questions regarding the Alpine oilfield could be answered, it was essential for the community to define its goals and agree on how to pursue them.

The result of this process was the formulation in 1995 of a tri-partite agreement between the Native Village of Nuiqsut, The City of Nuiqsut, and Kuukpik Corporation, whereby it was accepted that following discussions between the village entities, the relationship with the oil industry, with business partners and with state and federal agencies on questions relating to resource development and land management would be channeled through Kuukpik Corporation. Kuukpik in turn accepted that the corporation must pursue both its core business goals as well as pursuing benefits for the entire community as outlined in the 1979 Cultural Plan, *Nuiqsut Paisanich*.

This agreement opened the way for Kuukpik Corporation to enter into negotiations with other parties concerning access to and use of Kuukpik lands in the Colville River Delta for the development of the Alpine oilfield.

The agreement has served the community well for many years, although more recent developments in the village have made cooperation between the three entities more difficult. These will be dealt with in Chapter 10.

In other parts of the world, landowners of resource-rich lands are either overridden by government intervention or bought off by the oil industry with leases that are sufficient to open the lands to development. In the Colville Delta however, the unusual status of Kuukpik Corporation as owners to title of the land, recognized by both the state and federal governments, gave Nuiqsut a unique negotiating position which the leadership and management leveraged to the fullest extent. It was the vision of Kuukpik Corporation that Nuiqsut, instead of passively leasing its lands to the oil companies, would become an active partner in the development of Alpine, with a stake in the coming oil wealth. Their land ownership would be leveraged to secure a share in the oil revenue, income for land use, contracts for corporation subsidiaries, training and employment opportunities for Nuiqsut residents, and a range of mitigation benefits for the community. Similarly, empowered by land-ownership, the community would dictate certain terms regarding land use and oil field activities, to limit the impact on the environment and the subsistence resources.

Like most oil companies, ARCO was known for its ability to strike a hard bargain, and the negotiations with Kuukpik Corporation were not without initial difficulties. But paradoxically, it was not with the oil industry that Kuukpik Corporation and its leaders had the most arduous negotiations about Alpine.

The ownership of the sub-surface mineral resources on the North Slope rests with the State of Alaska, the Federal Government and, through its ANCSA lands-selections, Arctic Slope Regional Corporation. As a result of the founding of Nuiqsut and the selection, by Kuukpik Corporation, of lands in the Colville Delta, ASRC now owned the sub-surface rights to a major part of what would become the Alpine oilfield, in which ARCO held oil leases.

It would therefore be ASRC that would receive the landowner's royalty of 16 $^{2}/_{3}$% of the oil production from its leases at Alpine.

Although ASRC expected to have to pay Kuukpik Corporation for ARCO's access to Kuukpik lands, they did not initially expect that Kuukpik would receive a share in the royalty, and thus the prospect of greater revenues as oil production increased. It was envisaged that ASRC would receive the royalty and the North Slope Borough would receive tax revenues from Alpine, and benefits to Nuiqsut would follow indirectly, through borough funding for village projects or through dividends and employment to ASRC shareholders. It was also envisaged that ASRC subsidiaries would get the lion's share of service contracts at Alpine, and that employment opportunities for the villagers of Nuiqsut would be channeled through these subsidiaries. In Barrow, where the leaders of ASRC and the borough, closely intertwined through kinship ties, were located, there was the expectation that the villagers of Nuiqsut, not least out of gratitude for support during the early years of the village, would accept this approach.

There followed a painful legal battle before ASRC finally accepted that the community of Nuiqsut, through Kuukpik Corporation, was united in its demand that Kuukpik should become one of the royalty partners. Looking back after twenty-one years of Alpine and twelve years since the oilfield went into production, the citizens of Nuiqsut can be satisfied with the result of these negotiations.

With the royalty agreement with ASRC in place, the way was open for Kuukpik to enter into a Surface Use Agreement directly with ARCO concerning the other benefits that would accrue to the community as remuneration for the use of Kuukpik land.

One of the first demands that Kuukpik negotiated successfully with ARCO was that Kuukpik Corporation subsidiaries, many of them yet to be established, would have some priority on all oil field service contracts for work on Kuukpik land for which they were qualified and could submit a reasonable bid. In the few years while Alpine was under construction, Kuukpik rapidly entered into joint-venture agreements with a number of established oilfield service companies so as to be able to secure contracts for a wide range of services such as surveying, catering and cleaning, security, transport, construction and maintenance, and eventually, drilling. Most of these joint ventures were created as Kuukpik subsidiaries with the joint venture partner supplying the expertise and technology, and in some cases most of the working capital. By this strategy, Kuukpik was able to leverage its influence in the oil field and help established outside companies, which would otherwise have to face fierce competitive bidding and tenders, secure attractive contracts at Alpine. Given the relatively low oil prices of the nineties and the comparative reluctance of oil companies at that time to invest huge sums in new oil fields, this was a somewhat attractive proposition for Kuukpik Corporation's prospective joint venture partners.

It was also a win-win strategy for Kuukpik Corporation. At that time, the corporation had many debts and little capital to invest in new business ventures, yet its ownership of the land could be parleyed for the contracts that would provide revenue for the corporation and in many cases, employment opportunities for the community.

As will become evident in the following chapters, the decision by the community in the early nineties to embrace oil development in the Colville Delta and, through their village corporation, to become active participants in this development, laid the foundation for an enduring relationship between the community and the oil industry.

This set the tone of the proactive negotiating position that Kuukpik Corporation would adopt in the coming years, giving the community the ability to leverage fully its land-ownership and subsistence claims to the Colville Delta – not only in that part of the delta owned by Kuukpik Corporation, but ultimately on most of the land to which the Kuukpikmiut have a historical claim of use and occupancy, including lands to the west within NPR-A.

In pursuing the original agreement with ARCO, and subsequently with ConocoPhillips, as well as the agreements with ASRC and the North Slope Borough, Kuukpik Corporation has not only focused on its business goals. The nature of the tri-partite agreement with the other community entities has ensured that for almost twenty years, the management and leaders of Kuukpik Corporation have been acutely aware of the need to secure and maintain the broad acceptance of the entire community – shareholders and non-shareholders alike. Because of this factor, most of the subsequent benefits, besides those accruing from royalty revenues, have been sought and secured on behalf of the entire community. Issues such as employment and training opportunities, protection of subsistence resources, the mitigation of development impact on subsistence activities, and not least, the provision of cheap natural gas from Alpine to Nuiqsut, are examples of issues that Kuukpik Corporation has given high priority in its negotiations with the oil industry since the mid-nineties, and these issues continue to be of paramount importance.

These benefits achieved by Kuukpik Corporation are of much more than a token economic significance for the community. Mitigation funds inject several hundred thousand dollars annually into the village subsistence economy, and the provision of natural gas, which has brought a more economic, healthy and environmentally-friendly energy source to the community, is a tangible benefit to which every rural Alaskan community would aspire. Similarly, the measures to protect and monitor the local environment and subsistence resources serve as an important recognition of the sovereignty of the Kuukpikmiut over their lands and wildlife resources.

That the villagers, through their corporation, were able to establish ground rules whereby the mitigation of the potential, actual and perceived impacts of Alpine would result in the oil industry providing economic compensation and benefits for the community has only served to raise and maintain the expectations of the citizens over the years. As subsequent chapters will illustrate, this is perhaps one of the most pervading impacts of oil development and the Alpine oilfield on the socio-cultural fabric of the community.

With the framework for the relationship between Nuiqsut and the oil industry established, the construction of Alpine could proceed – first with the construction of CD-1, the main pad which would accommodate the first oil wells, the processing facilities for the entire field and the Alpine Operating Center – the "base-camp" that would provide accommodation, offices, workshops, stores and facilities for the hundreds of workers who would be involved in the construction and subsequent operation of the Alpine field.

The Kuukpik-Alpine partnership gave the citizens of this rural village a stake in the oil wealth of their homeland

The CD-4 pad at Alpine showing the pipe rack with the well houses behind. Five miles from Nuiqsut City Hall, this is the oilfield facility that is closest to the village .

The oil reserves of the Colville Delta

The oil reservoir of the Colville Delta consists of Alpine Sands, an oil bearing rock strata created during the Jurassic period that extended from 201.3± 0.6 Ma (million years ago) to 145± 4 Ma; from the end of the Triassic to the beginning of the Cretaceous. During this period, the North American continent was very different compared with today. The process of continental drift, the shifting of continental tectonic plates, gradually formed the North American continent and indeed all other continents. As the continental plates moved and collided with each other, mountain ranges such as the Brooks Range were thrusted upwards, lifting what had been the ocean floor in some places and submerging what had been dry land below new oceans in other places. Where land masses converged, this great force created faults where the surface of one area became submerged (subducted) beneath another, creating strata containing organic matter that over the next several million years would be compressed and become reservoirs of oil and gas.

The North Slope of Alaska is one result of this geological process. The convergence of continental plates created the Brooks Range and, where the mountains and the ocean floor subsequently converged, subduction created the Kingak Formation, capturing hydrocarbon rich sands within a sloping stratum that dips southwest at a rate of approximately 100 feet per mile. As a result of the subduction faults, these strata overlay each other in some places. The typical depth of the oil pool is now defined as the accumulation of hydrocarbons common to, and correlating with, the interval between the measured depths of 6,980 feet and 7,276 feet in the Alpine No. 1 well. The gross thickness of the combined reservoir sandstone layers ranges up to 100 feet, with strata as thin as five to fifteen feet in some areas. [27]

The five Alpine drill sites are numbered with the prefix "CD" (for Colville Delta) The oil field of the Colville River Unit comprises several oil pools, though some of these have since been reclassified as related (see below). The pools are defined as Alpine, Qannik, Fiord and Nanuq and are accessed via CD-1 to CD-4. CD-5 is currently under development to the west of the Nechelik Channel, and is located within the eastern edge of NPR-A.

[27] Source: Alaska Oil & Gas Conservation Commission - online statistics

Exploration and production in the delta has shown different oil characteristics across the Colville River Unit, with crude oil gravity ranging typically from 39 to 42 API [28], though as low as 27 to 32 API at Fiord and Qannik. The reservoir pressures, as measured during the initial drilling, though falling as oil is extracted, ranged from 1,850 psi (Qannik) to 3,200 psi (Fiord). Typical reservoir temperatures range from 89°F to 163°F (31.7°C to 72.8°C)

When the field was first explored in the nineties, it was unclear whether the oil reserves of the Colville River Unit (as the Alpine field is correctly known) comprised a single oil pool or a number of separate and unconnected oil pools. Therefore, during the early exploration from CD-1 of Alpine and the adjacent Nanuk-Kuparuk oil pool these were treated, in accordance with Alaska State law, as separate leases and separate oil pools.

Recent drilling and development operations demonstrated that the Alpine reservoir and the overlying Nanuq-Kuparuk reservoir are in pressure communication throughout the central and southern Colville River Unit. Because they are in pressure communication, these two reservoirs must be classified as a single oil pool according to AS 31.05.170(12). Conservation Order 443B, issued March 26, 2009, expanded the geographic and vertical boundaries of the Alpine Oil Pool to include both reservoirs. As the years have passed and the Colville River Unit has been delineated, the estimate of the total recoverable oil reserve has risen to 675 mmstb (Million Stock Barrels), of which 470 mmstb have already been extracted, leaving an estimated remaining reserve of 205 mmstb. [29]

The long-term viability of the Alpine field and its infrastructure is dependent on both the remaining recoverable reserves within the Colville River Unit (where reserves could yet prove to be larger than currently estimated), and the extent of reserves in neighboring areas

[28] The American Petroleum Institute gravity, or API gravity, is a measure of how heavy or light a petroleum liquid is compared to water.

[29] EUR - Estimated Ultimate Recovery, an estimate of the amount of oil recoverable using the currently available technology and methodology. Figures from Alaska Department of Natural Resources, May 31 2014

such as NPR-A which are currently under exploration and delineation, the extraction of which will utilize the existing infrastructure and processing facilities of Alpine. So while the current daily production rate of 46,000 BOPD[30] might lead one to conclude that Alpine has an expected lifespan not exceeding 12 years, such a simple calculation would be misleading, because it is the strategic position of Alpine in the Colville River Delta and on the eastern border of NPR-A that will ultimately define the long-term economic viability of the field as a whole.

With continued expansion and development outside the Colville River Unit itself, continued extraction within the unit, which seen in isolation may be economically inviable, may yet prove to be profitable given the overall utilization of the facilities and infrastructure. As with all oil fields, the potential economic viability of Alpine is not only dictated by internal factors such as the productivity of the field or the value of the existing infrastructure to new activities in the area, it is also dictated by the changing market price for oil and the nation's geopolitical interests in promoting domestic energy production to achieve greater independence on foreign oil.

With regard to all these aforementioned factors, the prospects for the Colville River Unit seem good for the next two or three decades at least.

[30] The 2012 figure of 46,000 BOPD (Barrels of Oil, per day) from ConocoPhillips information brochure "Alaska Key Assets (CP-0447/LR-6). According to the statistical report of the Alaska Oil and Gas Conservation Commission, oil production from the Colville River Unit during the year of our fieldwork in 2013 was 22,644,593 for the year, giving an average production of 62,040 BOPD.

The logo for Alpine reflects the relationship with the Kuukpikmiut

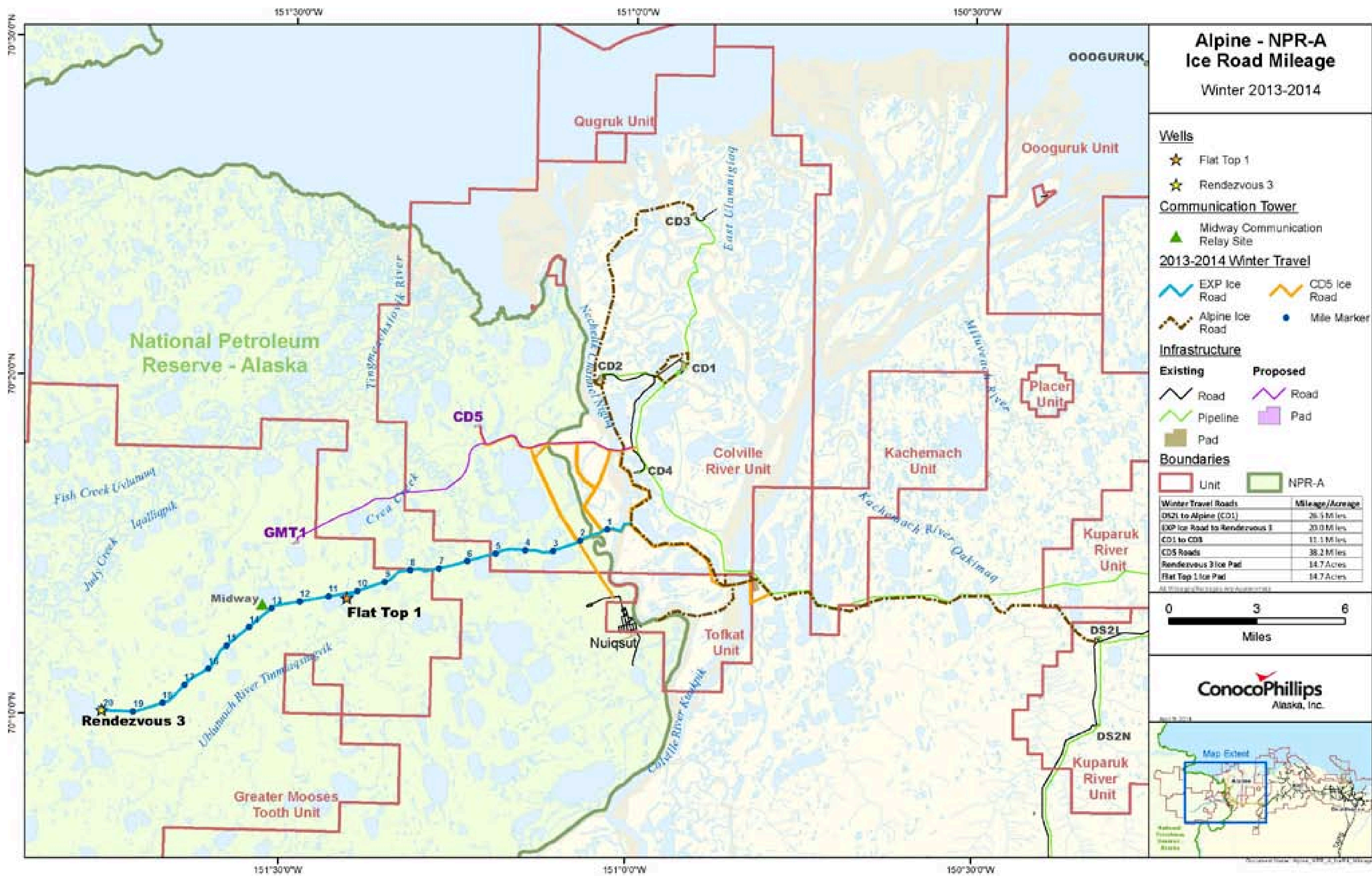
An island on the tundra

From its inception, the Alpine oilfield was a new approach to oil production on the tundra, an approach which eventually would set the standard for new oilfields across the North Slope and in other parts of the world. Given the fragile natural environment and flora of the tundra, the many lakes and waterways and the importance of the delta as a breeding ground for many important species of waterfowl, mammals and aquatic life, there was little prospect of the various state and federal permitting agencies allowing ARCO to build a protracted oil field with permanent roads and extensive facilities.

The message from the regulators to ARCO was clear, Alpine must be an island on the tundra, with a minimal ground footprint, with minimal land use for facilities and storage, and with no permanent road connection to the outside world. Equipment and supplies must either be flown in, or trucked in over ice-roads during the winter season. Likewise, this also implied that drilling rigs, for exploratory and development drilling and maintenance work-overs, could only be moved on ice-roads during the winter.

The annual ice-roads serving Alpine make a vital contribution to the economy of Nuiqsut, in that the winter construction and maintenance period provides employment for many Nuiqsut residents, as well as providing the economic foundation for the Kuukpik Hotel, which serves as a work camp for the ice-road crews. During the 2013-2014 construction season, the ice-road crews constructed a total of 77 miles of ice road, connecting Alpine with Kuparuk and the satellite fields of CD-3, CD-5 and NPR-A, at a cost of more than $1 million per mile for a road that will melt in the following summer thaw.

Besides bringing employment to the village each winter, the ice-roads give Nuiqsut a temporary road access to the outside world, enabling the villagers to import motor vehicles, machinery, building supplies and other heavy goods which otherwise would have to be flown in at considerable cost. The ice roads also extend the villagers access to their hunting grounds.



Colville River Unit ice roads - 2013-2014 season

Twenty-five years earlier, during the development of the Prudhoe Bay field, such a policy would have been technically impossible to implement, but in the intervening years the oil industry had mastered new technologies that would enable them to meet these conditions at Alpine.

The most important of these new technologies was directional drilling, by which a drilling rig could steer a drill string underground away from the vertical, enabling the drill to reach a destination far away horizontally from the drilling pad. Directional drilling had been developed in the 1930's by H. John Eastman in California, initially as a means to drill relief-wells to divert and relieve pressure on adjacent wells that had blown out or were dangerously close to doing so. This innovation proved critical to extinguishing a well fire in Conroe, Texas in 1934. Afterwards Eastman and others developed the technology further to extend the reach of a single drilling pad by thousands of meters. By the seventies, his company, Eastman Whipstock Inc, was the world's largest directional drilling company. The capabilities of directional drilling technology were extended with the development of "down-hole" motors and navigational tools such as gyroscopic compasses that enabled the drilling crew to steer and plot the course of the drill string with amazing accuracy. The current world record holders manage wells over 10 km (6.2 miles) away from the surface drilling location at a true vertical depth of only 1,600 to 2,600 m (5,200 – 8,500 ft). [31]

The implications of directional drilling for the Alpine oilfield were revolutionary. Whereas in Prudhoe Bay or Kuparuk, an oil pool the size of the Colville Delta could have required hundreds of wells on twenty or more drilling pads. As it was, with directional drilling technology, the two initial Alpine pads, CD-1 and CD-2, could penetrate an oil reservoir of over 50 square miles area. Today, with four drill pads in operation and another (CD-5) under construction, Alpine manages over 200 wells.[32]

[31] Maersk Drilling at Al Shardeen, May 2008

[32] Not all wells are oil production wells. Besides production wells there are wells for re-injection of gas or water to maintain pressure in reservoirs feeding the production wells, and some wells that are used for disposal of waste materials such as drilling cuttings and sewage. There are also some wells, such as early exploratory wells that have been plugged and are no longer in use.

Another development vital to Alpine was the ability to construct high density drilling pads, where many wellheads can be placed closely together on a pad that occupies far less tundra area than before.

Both wellhead installations and the drilling rigs that are active in the Colville Delta are designed or have been modified to allow the wells to be placed close together, while still allowing rig-access during initial drilling and subsequent well maintenance. The original Alpine field was permitted at 97 acres of surface area on two pads (CD-1 & CD-2) and with the satellite fields (CD-3 & CD-4) the entire field still occupies only approximately 165 acres, including airstrips and gravel roads.

One of the early concerns of the residents of Nuiqsut was the possibility of oil pipelines connecting the Alpine drill sites and the production facility to the pipeline network at Kuparuk hindering the passage of animals, particularly the caribou, on which subsistence hunters from Nuiqsut are dependent.

Elder hunters who had hunted in the region in the early days of Prudhoe Bay and Kuparuk maintained that the pipelines there, which initially were installed on vertical support members (VSM's) three or five feet above the tundra, were a serious hindrance for the caribou migration, especially in the fall, when the big herds pass through the area, causing the herd to divert its migration route far away from the areas usually used by the hunters. The first pipelines at Alpine for CD-1 and CD-2 were also installed on five-foot VSM's, after which Kuukpik Corporation demanded, and achieved, that subsequent Alpine pipelines be installed with a clearance of seven feet, under which the caribou easily can pass.

The "island on the tundra" concept concerned not only the physical isolation of Alpine, it also reflected the socio-cultural policy of the community of Nuiqsut.

As we have outlined in Chapter 4, while most of the villagers accepted and to a certain extent welcomed the development of Alpine, there was widespread concern in the community during the nineties

Alpine CD-1 - an island on the tundra

that Alpine could bring outsiders into the village, in such numbers that the community would be overwhelmed and could even become outnumbered by non-Iñupiat workers.

The citizens of Nuiqsut were adamant that their village should not be consumed by the oil field, and that the development of Alpine should not alter the demographic composition of the community. This standpoint implied that there would not be a permanent road connection between the village and Alpine, and that the Alpine workforce and traffic would arrive and depart directly by air to other oilfield hubs such as Kuparuk and Deadhorse. The only influx of outsiders from oil related activities that would be permitted were seasonal transient workers engaged by contracting companies on contracts such as ice-road construction, typically employed by Kuukpik Corporation or ASRC subsidiaries. As such, these workers would not become residents of Nuiqsut, though they would be housed for the duration of their work periods in temporary work camps.

To begin with, a small construction camp was built in Nuiqsut, opposite the school, to provide such accommodation. In the late nineties, as needs grew, a larger accommodation camp was built at the north of the village, becoming known as the Kuukpik Nullagvik Hotel [33], which also provided restaurant and catering services to the community, as well as accommodation for a wide range of visitors and service contractors engaged in local capital improvement and maintenance projects, essentially unrelated to the oil industry. The hotel is owned by Kuukpik Corporation and operated by Kuukpik Arctic Catering - a oilfield service company that also has similar operations in other parts of the North Slope oilfields.

The citizens' desire to maintain and protect the ethnic and cultural identity of their community prevails today, not least because many of the negative social impacts and cultural changes that Native communities such as Nuiqsut have experienced in the past fifty years are seen by the local people as the result of forces external to the Native community.

[33] In the Iñupiaq language, Nullagvik means "a good place to rest"

The desire to maintain a degree of isolation from the outside world is one example of the paradox facing communities such as Nuiqsut. To maintain the social and cultural values and the way of life that characterize a rural Native community, the citizens also have to forego many of the benefits or conveniences that modernization and with it, a breakdown of the isolation, brings with it. Contact to the outside world is one example.

Maintaining a modern community in a village such as Nuiqsut is expensive, and at some times of the year, almost impossible due to the lack of a permanent road connection to the rest of Alaska. Similarly, keeping the oil industry at a distance for social and cultural reasons also has negative social and cultural consequences, in that it makes it harder for local people to pursue employment in the oil field while maintaining their subsistence way of life and relationship with their family. The lack of a road connection between Nuiqsut and the oil fields – Alpine, Kuparuk and Prudhoe Bay, meant that for two or three weeks at a time, oil field employees from Nuiqsut had to live and work away from home, often amongst many non-Iñupiat, in a working and social environment which is quite different to that which they are accustomed in Nuiqsut. This factor alone has made it more difficult for the oil industry, including Native corporation subsidiaries, to attract and keep local employees. The new spur road to Alpine will help.

The island on the tundra approach was dictated first by legislation and public regulators, supported also by many environmental organizations that argued for the most stringent limitation of oil industry activity on the tundra. It is an approach that has not been without success. It challenged the oil industry to find new ways of exploring and producing oil in a vulnerable natural environment. It gave the local Native population a degree of influence over the practical construction and operation of the oil field, and it echoed the social and cultural goals of the Iñupiat community of Nuiqsut. In doing so, it has set the standard for future oil development on the North Slope, and has demonstrated that the oil industry is able to address the environmental limitations that will almost certainly be set as a precondition for its future advance into NPR-A.

Furthermore, it has given the oil industry the opportunity to prove that the potential harvest of energy from the tundra, even under stringent regulations, with the requirement for huge capital investment, and with many unique logistic and technological challenges in a harsh climate and natural environment, can still be a profitable business venture.

Today there is a clear distinction between "stand-alone" drill sites such as CD-3, which must be completely self-sufficient with emergency accommodation, airstrip, water treatment and spill response facilities, and "satellite" drill sites, such as CD-2, CD-4 and CD-5, which have a gravel road connection to Alpine and thus can more easily share many of the common human and mechanical resources and technical infrastructure of the Alpine Operating Centre.

Given current expectations for emergency and spill response and the concerns of North Slope residents about the impact on subsistence by the aviation traffic necessary to support roadless facilities, it seems unlikely that future drill sites, for example in the NPR-A, would be developed according the completely "stand-alone" concept, and in this respect, CD-3 must be seen as an exception.

Although the legislative and permitting factors behind the "island on the tundra" approach prevail to this day, there are signs that many of the citizens of Nuiqsut welcome the new road connection between the village and Alpine. We address this issue later in this report.

Ice road traffic near Alpine

Ice pad for parking and winter storage at Alpine CD-1

The ice roads enable heavy freight to be trucked to Alpine in the winter

A Roligon vehicle that can drive on the tundra in the winter

Land ownership in and around the delta

Prior to statehood in 1959, the lands of the Colville Delta were owned, according to US law, by the federal government, though with the exception of a few, small Native allotments and a single private settlement at Anachlik Island [34]. In 1959, the newly established State of Alaska was entitled to select some of the federal lands for state ownership. The selection process, which after fifty-five years is not yet fully completed, was delayed in many parts of Alaska by the Natives' fight for the land and the subsequent passing of ANCSA.

Following ANCSA, almost 400,000 acres of land in the Colville Delta were set aside as a withdrawal area, from which Kuukpik Corporation subsequently could select the 115,200 acres of land to which it was entitled under ANCSA.[35] Kuukpik Corporation was also entitled to select 30,933.81 acres of lands to be reallocated by ASRC. [36]

Kuukpik Corporation owns 46,400 acres of land within NPR-A. Most of the remaining land in the Colville River Delta is owned by the State of Alaska. Most of the land in NPR-A is owned by the federal government.

In the first two decades since the discovery of Alpine, a significant part of the successful oil development has taken place under Kuukpik land, giving the corporation and the community both a stake in the oil produced and, as landowner, a high degree of influence over the development and operation of Alpine. It must be noted however, that future oil production in areas of NPR-A past the Greater Mooses Tooth Unit (GMT-1) will gradually accrue from the sub-surface of lands, the surface of which is not owned by Kuukpik Corporation. While the community has extensive subsistence use of such lands, which may well give rise to mitigation or compensatory revenue, it seems that not all of the oil development that will come to the west of the Colville River Unit will produce royalty revenue for Kuukpik Corporation.

Land ownership is not the only factor governing the oil industry's access to lands in the region, land jurisdiction is also an important factor.

Regardless of land ownership, any lands on the North Slope that are classified as wetlands (which accounts for most of the land area) are under the jurisdiction of the US Army Corps of Engineers, from whom permits must be obtained for any oil development. Similarly, both the federal government, through agencies such as the Bureau of Land Management, the US Fish and Fish & Wildlife Service, and the State of Alaska through agencies such as the Department of Natural Resources and the Department of Fish & Game, have overlapping, and sometimes conflicting, interests and jurisdictions over the lands of the North Slope.

Finally, the North Slope Borough has both taxation powers and the planning and zoning jurisdiction over the entire North Slope, and the municipality asserts its authority on a wide range of issues relating to the potential impact of oil development on the environment, the wildlife and the communities. Approximately 90% of NSB revenues stem from oil field taxation.

This patchwork of land-ownership and regulatory jurisdiction implies that oil exploration and subsequent development involve complex and time-consuming processes. Whereas in some countries, such as Norway, the permitting and regulatory framework for oil development in a given area is resolved and well-defined prior to the sale of oil leases, the process in the United States is somewhat different. The State of Alaska or the federal government may hold lease sales and the oil industry may invest billions of dollars in developing such leases, with no guarantee of receiving a permit to drill or to produce. The situation is even more complex with regard to offshore exploration and production, because even more agencies are involved.

So while Kuukpik Corporation's land ownership status gives Kuukpik and the community a certain leverage, the corporation is in some cases a small player in the wider picture of negotiations and political processes that take place with the development of new oil resources.

[34] Anachlik Island, established by Bud & Martha Helmericks in the mid-fifties. The Helmericks Camp, also known as Colville Village, operated as a commercial fish-camp for many years and is still occupied by the Helmericks family. As the only non-Iñupiat settlement on the North Slope, one which pre-dates ANCSA, the Helmericks family and their settlement were not always welcomed by all Iñupiat.

[35] Bureau of Land Management records for 2005 indicate that 69,880 acres had been patented to the corporation and a further 35,077 acres were pending conveyance.

[36] BLM records (2005) indicate that 7,239 acres had been conveyed and 14,068 had been interim conveyed.

The balance of power is not static. In some cases, state or federal agencies pursue their interest of promoting development enthusiastically, often running rough-shod over the interests of the Native population and their subsistence culture.

In other cases, the same agencies might be over-protective of the subsistence or environmental interests of the Native community, ignoring the fact that through their village and regional corporations, the Iñupiat may have sound arguments for supporting a given development, and that their voice, as the community most directly involved, should be heard. It is a fact that many of the development policies dealing with the North Slope are dictated by national political interests, in Congress, in the bureaucracy of Washington DC and amongst the various lobby organizations, many of the members of which will never set foot in Alaska. Neither are the interests of Kuukpik Corporation always fully aligned with those of the North Slope Borough or ASRC.

It must therefore be understood that any evaluation of the success or failure of Kuukpik Corporation and the other village entities to navigate a course of "balanced development" must recognize the scale of the challenge that Kuukpik Corporation and its officers have faced during the past two decades.

In many respects, the relationship between Kuukpik Corporation and the oil industry is more straightforward, not because their interests are wholly aligned, but because the differences between their corporate goals are more clearly defined and understood by both parties, and that such differences are complementary. It is only by some degree of agreement and cooperation that each can achieve its objectives.

A pair of tundra swans over the tundra at Alpine CD-2

Operation and production

It took less than a decade for Alpine to grow from an exploration project to a producing oil field. During these first years, Alpine was essentially a construction site. No oil could be produced until the processing facilities and their interconnecting pipelines and services were completed, and until the pipeline to Kuparuk was built. The accommodation camp was built as modules that were trucked in on the ice-road during the winter, along with construction materials for some of the camp facilities such as workshops, stores and the water treatment plant. Almost all buildings were constructed above ground on steel pilings, driven into the tundra, to prevent heat from the buildings melting the permafrost and causing subsidence. The few buildings that needed to be at ground level, as well as all the roads and traffic areas at and between facilities, were built on insulated gravel pads to protect the tundra.

The major industrial buildings to house the processing facilities where oil, gas and water are separated, as well as pump stations and a power generation plant, were built as huge modules in 1999 by shipyards in Louisiana and on the Kenai peninsular in South Alaska, to be shipped in, first by ocean-going barges to Oliktok Dock on the Beaufort Sea north of Kuparuk, then moved by road and ice-road to Alpine for assembly and completion. By 2000, the first wells at CD-1 were ready to produce and the production facilities were completed. Alpine went into production.

As in all oil fields, the transition from exploration to construction to operation happened gradually. As the first wells began to feed oil and gas into the processing facilities and further on via Kuparuk and Prudhoe Bay to the Trans Alaska Pipeline, exploratory drilling continued giving ARCO a more comprehensive delineation of the field. With rising oil prices and promising results from the first wells, drilling and construction continued, with the second drill site at CD-2 going into production in 2001.

The oil production of the Colville River Unit peaked in 2007, with a one-day production record of 139.000 barrels.

Since then the output of the field has fallen, though this is offset in part by additional wells and the quest for new oil pools outside the Colville River Unit, which will be able to utilize the production facilities and infrastructure of Alpine.

As we will describe in more detail later in this report, in 2009 Alpine began supplying natural gas to the community of Nuiqsut. Besides this supply to the village and the natural gas consumed by power generation at Alpine, all natural gas produced in the field is injected back into the reservoir.

Colville River Unit Annual oil & gas production data			
Year	Oil million bbls/yr	Gas billion cu.ft/yr	Gas supplied to Nuiqsut million cu.ft/yr
2000	2,231	1,099	0
2001	31,932	4,033	0
2002	35,041	4,822	0
2003	35,582	5,263	0
2004	36,095	5,716	0
2005	43,813	6,321	0
2006	44,247	6,067	0
2007	45,468	6,486	0
2008	39,784	6,323	0
2009	37,704	6,630	0.285
2010	32,896	data not available	0.285
2011	29,304	data not available	0.285
2012	25,785	data not available	0.285
2013	22,656	data not available	0.285

Source= Alaska Oil & Gas Commission and ConocoPhillips Alaska Inc.

Since the seventies, the operation of the Prudhoe Bay field was mostly divided between ARCO and BP, and ARCO was the operating company for the subsequent development of the Kuparuk field – extending the company's reach westward into the Colville River Unit with the development of Alpine in the nineties. Though many other oil companies had leases and interests on the North Slope, it was ARCO and BP who operated most of these oilfields.

In April 2000, ARCO was purchased by BP America, as part of BP's strategy of expansion in the US, comprising both exploration, production, refining and distribution activities. While the acquisition of ARCO by BP was approved by the Federal Trade Commission, approval was subject to the provision that the activities of ARCO Alaska should be sold to another oil company, to prevent BP attaining a monopoly on the North Slope. ARCO Alaska was thus sold to Phillips Petroleum in the same year. In 2002, Phillips Petroleum merged with Conoco Inc, becoming ConocoPhillips.

The subsidiary, ConocoPhillips Alaska, Inc. (CPAI), became a major holder of North Slope oil leases and Alaska's largest producer of oil and gas. The Alpine leases are owned in partnership by CPAI (78%) and Anadarko (22%) with CPAI as the operating company.

The takeover by CPAI came only two years after the Alpine field went into production. For CPAI, Alpine was a unique oil field, due to the relationship with Native village and regional corporations and the "island on the tundra" concept that was essential for permitting and operation.

The Alpine Operating Center adjacent to CD-1 is the processing facility for oil from all the Alpine wells

Employment at Alpine

In less than a decade, Alpine had become a tightly-knit working community, with many company staff and contractors having worked there since the beginning, resulting in a workplace culture that was quite unlike that in other North Slope oilfields.

Although an oilfield involves the efforts of hundreds of workers, it is usual in most oilfields that the operating company employees only constitute a small proportion of the labor force. In fact, few of the jobs are directly related to the business of producing and processing oil, most of the workforce is involved in construction, maintenance and support functions, which are usually handled by contractors that have specialist knowledge and expertise and which can be hired and fired as the fluctuating cycle of operation, maintenance and exploration dictates.

During the early construction years, Alpine had accommodation for over 400 employees, and in recent years accommodation has been expanded to over 600 people, though these figures reflect the maximum number of employees typically on site during the winter construction season. Unlike fields in Prudhoe Bay or Kuparuk, where permanent road connections make it possible to move employees between camps and work sites on a daily basis, the "island" status of Alpine dictates a more stable allocation of jobs.

This situation is also reflected in the hardware and technology of the oilfield. Because transport of heavy machinery to and from Alpine is limited to a short winter ice-road season, some specialized equipment which in other fields would be hired for limited periods, must either be bought or hired for a year at a time, to ensure that construction, maintenance and operation can proceed all year.

The limitations imposed by the "island concept" have also meant that the operating company at Alpine often retains the services of specific contractors for many years, because the logistics of changing contracting company, workforce and equipment often outweigh the economic gains of a more fluid contracting process.

Native-owned contracting companies have been prominent at Alpine since the beginning – first with ASRC subsidiaries, later with subsidiaries of Kuukpik Corporation and other corporations such as NANA, UIC and Doyon.

Agreements between the operating company and the regional and village corporations pursue preference for Native-owned companies in areas in which they are more than capable of being competitive. Similarly, a proactive policy of Native/shareholder hire has given many Iñupiat from Nuiqsut the opportunity of employment at Alpine.

There are many employment opportunities in an oilfield such as Alpine. Most operational and many contracting positions are staffed 24 hours a day, usually in two twelve-hour work shifts. Employees work at Alpine on a two, three or four week hitch, followed by a similar period of leave, during which time their job is held by an alternate. This means that most positions are filled by at least two employees, and 24-7 jobs give employment for four employees.

Also, with the unique isolation of Alpine, comparatively more jobs are filled by regular employees of CPAI and its contractors than by itinerant labor that is only contracted for a short period.

During the construction phase and subsequent winter construction seasons, there are many jobs for which some of the villagers of Nuiqsut are qualified. These are typically construction jobs such as heavy-equipment operators that require many of the skills that villagers had due to their previous work for the North Slope Borough on the capital improvement projects in the village in the eighties. The busy construction periods at Alpine also create the need for many unskilled and semi-skilled employees such as drivers, caterers and cleaners, who are needed to support the operation of the camp. There are also many skilled craft trades in the oilfield, such as electricians, water-plant operators, welders and fitters, and plant and drill site operators, yet these jobs demand training and experience which few of the residents from Nuiqsut currently have.

Martha Lampe and Eva Kunaknana from Nuiqsut working for security services at Alpine

Many of the support and service contracts at Alpine are held by Native-owned companies, such as ASRC or Kuukpik subsidiaries. These companies generally find their employees amongst the skilled non-Native workforce in South Central Alaska and even out of state. The lack of qualified and experienced craft employees in the Native population has always been the major barrier to greater Native hire, despite the fact that both CPAI and the Native-owned contracting companies have long had a policy of employment preference for North Slope residents.

Different Native corporations have pursued and achieved different results with regard to balancing the goals of developing successful businesses and the creation of permanent employment opportunities for their shareholders.

Generally, regional corporations have been more successful in the creation of businesses which provide training and employment opportunities for many shareholders than the village corporations. This is due to several factors.

Firstly, the regional corporations have a larger shareholder base from which to recruit and train employees for their business ventures. Secondly, the regional corporations have had greater capital resources to invest in business. Thirdly, the regional corporations were a direct result of the land claims campaign and ANCSA, and their leadership, from the early days, included many of the politically astute, experienced and respected leaders, which in turn gave them a sound basis for starting businesses and leveraging their economic and political influence. Lastly, the regional corporations, under ANCSA, became the owners of much of the sub-surface resources that would form the basis for Alaska's growing oil and mineral industries, giving them a negotiating considerable power with the industry which village corporations would need many years to develop.

Many Native-owned regional and village corporations established business ventures in the oil and mining industries, particularly those corporations on the Arctic Slope, the Northwest Arctic Region and the Interior (Doyon) region. ASRC was particularly successful in establishing oil field service companies, contracting companies and businesses providing catering and security services.

In the Northwest region, the regional corporation NANA, with its ownership of the lead and zinc rich lands around Red Dog Mine, established a unique joint venture with the Canadian mining company Cominco (now Teck Alaska Inc.) which achieved one of the highest shareholder hire ratios in Alaska. On the North Slope, the Athabascan Indian regional corporation Doyon, through its subsidiary Doyon Drilling, has achieved both commercial success as one of the leading drilling companies on the North Slope, and a remarkable level of shareholder hire on its rigs.

The success of regional corporations such as ASRC, NANA and Doyon in creating training and employment opportunities for Native shareholders in the oil and mining industries is not only due to the capital and political strength of these corporations. It is also due to the leadership having a clear vision and goal of shareholder hire at the right time in the development of the industry.

These corporations also identified business activities in which it would be possible to train, employ and motivate shareholders, often in operations which lent themselves easily to establishing a close-knit working culture in which Native employees would not be in a minority.

Some village corporations, such as Kuukpik Corporation, have also pursued similar goals. Kuukpik Corporation is perhaps one of the most active village corporations in the industry, with many joint ventures to its name, most of which are also active on the North Slope. With fewer shareholders from which to recruit employees, and with less capital to invest in training and business development, village corporations have made a somewhat slower entry into the industrial marketplace and to an extent greater than their regional counterparts, have had to be more reliant on non-Native labor to fill the employment opportunities which their business ventures have made possible.

Compared to the early years of the North Slope oil fields in the seventies and eighties, the community of Nuiqsut today has wider opportunities and greater influence in the development of business and employment opportunities.

The development of Alpine, and the prospect of future development in and around the Colville Delta and the NPR-A give the leaders of Kuukpik Corporation opportunities which their predecessors did not enjoy. The ownership of the land remains the key to both the political and corporate leverage of Kuukpik Corporation, though their goal of creating training and employment opportunities for their shareholders and other Nuiqsut residents will always be limited by the small population pool from which they can recruit, just as the current economy of the village with regular dividends for shareholders also reduces the incentive for some citizens to seek training and permanent employment.

In the early years, the employment opportunities at Alpine for Nuiqsut residents were mostly filled by men who had previous experience with construction work.

As the construction of Alpine was completed, the number of Nuiqsut residents employed fell. In recent years the pattern has been similar – with more employment opportunities during the winter construction season, typically on ice-road construction and maintenance.

There have been some Nuiqsut residents that have achieved training and permanent employment at Alpine, currently including one who is employed as a water-plant operator, and one as a production plant operator - both highly skilled positions in the oilfield. Some Native employees at Alpine no longer reside in Nuiqsut, preferring to use their income to live in Anchorage or other urban communities, where their families can enjoy more employment, leisure and educational opportunities. During the period of our fieldwork visits (2013) there were approximately fourteen Native employees at Alpine, mostly male, in maintenance and operations positions. Not all of these were Nuiqsut residents.

Given the large number of job opportunities at Alpine, together with the various opportunities for education and training offered by ConocoPhillips and Kuukpik Corporation and its subsidiaries, it is surprising to outsiders how few Iñupiat from Nuiqsut have pursued training and a career at Alpine. There are several reasons for this.

A job at Alpine demands that the employee lives and works away from the village and his or her family for several weeks at a time. Such a lifestyle is still quite foreign to most Nuiqsut residents.

The subsistence culture of the village is the predominant lifestyle of the community. Despite modern hunting methods and aids such as motor boats, snow-machines and four-wheelers, subsistence hunting remains a traditional way of life in which much is prepared but little is planned. The villagers spend the most of the year preparing for each hunting season or subsistence activity; a time-consuming process that involves entire families. Subsistence is a free lifestyle, that demands energy, hard work and commitment, but which is carried out in a way that is free of the stress and timetable associated with the industrial workplace.

The reasons for this are both cultural and integral to the subsistence way of life. Despite much preparation, very little can be planned exactly, as the migration of the animals and important changes in the natural environment are beyond the control of the hunters. Therefore the pursuit of subsistence requires that the hunter and his family are able to react as nature dictates, which leaves little room for regular employment commitments, unless the individual is willing to accept the stress of combining two lifestyles. While subsistence remains of great economic importance to most villagers, each hunter is also driven by a long-established sense of honor and responsibility to his family and the community. Any other activity, such as employment outside the village, that implies that a hunter may not be able to fulfill his cultural obligations is thus less attractive.

Although the opportunity of permanent employment at Alpine or other oil field workplaces has a clear economic incentive, such incentive is offset by the fact that in recent years, Nuiqsut residents – particularly those who are Kuukpik shareholders - have received large dividends from the corporation. Many non-shareholders are in a family or household with shareholders whose dividends also contribute to the household economy.

With the combination of dividends from Kuukpik Corporation, ASRC, the annual State Permanent Fund dividend and various mitigation funds, all of which are payable without the recipient having to work, the incentive to take on full-time employment, with all the restrictions that such imposes on family life and subsistence activities, is much reduced.

Seasonal employment opportunities are more popular. ConocoPhillips and the many contracting companies regularly hold recruiting drives to seek employees from the community for seasonal projects such as ice-road construction, hotel and catering and environmental monitoring. Many residents take such positions each year, but few stay at work for the whole season for which employment is available. The village seems to have an economic cycle of "boom periods", such as when dividends are paid out and "bust periods" when the dividend income is spent and families have less available cash.

During such periods, many take seasonal employment to help their finances until the next dividend is paid, at which time many stop working.

The same social and cultural mechanisms and economic factors apply both to employment at Alpine and other employment opportunities outside the village. For these reasons, Nuiqsut residents prefer employment in the village, and the various community entities such as the City of Nuiqsut, The North Slope Borough, Kuukpik Corporation and the Native Village of Nuiqsut strive to create as many jobs in the community as possible.

Many villagers prefer to work in Nuiqsut rather than to work outside the village

Public sign outside Nuiqsut City Hall

Another vital factor that influences local hire – both at Alpine and in other workplaces – is the strict alcohol and substance use regulations that exist in these workplaces. All employees at Alpine and in most village workplaces are subject to drug and alcohol testing prior to employment and random testing at subsequent intervals. Any employee who fails his or her urinalysis will either be refused employment or sent home until they can pass the test. Repeated test failure may result in the individual being unable to seek employment for a longer period.

Despite the isolation of Nuiqsut and the fact that the community has always voted to remain dry (where the sale and import of alcohol is prohibited) alcohol is abundant in the community, though most drinking goes on behind closed doors. There is little contemporary, reliable documentation of the extent of alcohol consumption in the community, and even less documentation regarding substance abuse, therefore any description here of either is based on our own observations and anecdotal testimony. From our many visits over many years it is obvious that while some individuals do not drink alcohol or use drugs, most citizens are aware of those who do and many will speak openly about the extent of alcohol and substance abuse in the community. Outsiders like ourselves might find it hard to comprehend the prevailing attitude of the community regarding alcohol, but it is important to recognize that the situation in Nuiqsut is comparable to many other rural communities in the Arctic. Almost every family has first-hand experience of the problems of alcohol, and while there are many who consider moderate private alcohol consumption, albeit contrary to the local prohibition, to be acceptable, there are few who are willing to vote for the village to become a "wet" or "damp" community[37] , because they fear the consequences of such a policy, especially for the younger generation. Some community organizations, particularly the church, are particularly vocal about alcohol issues.

Most employers and supervisors with whom we spoke during our research visits could confirm that many Nuiqsut citizens fail their urinalysis tests and must be terminated from employment, or they simply stay away from work after a rest and recreation period, because they know that they will fail the test. From our conversations with both employers and Nuiqsut residents it would seem that the prevalence of alcohol consumption and drug abuse in the community remains a serious obstacle to employment.

Some of the regular employers who have close contact with the community, as well as some Iñupiat corporate and community leaders are regularly vocal in the community regarding this problem. Besides being an obstacle to employment, alcohol and drugs are major factors in many other social and cultural problems in the community, as well as being a contributing factor to some of the tragic accidents and domestic disturbances that occur in the village. At Alpine, as in the rest of the North Slope oil industry, the alcohol and drug policy is clear and unequivocal. Employees are subject to testing at any time, and must not be under the influence or in possession of either when arriving on site. No alcoholic beverages are sold in any of the work camp canteens or commissaries, and the possession of alcohol or drugs is a dismissable offence. The primary reason for this policy is one of safety.

[37] In Alaska, a "wet" community is one in which the sale and consumption of alcohol by adults is legal – as is the case in most urban communities such as Anchorage and Fairbanks. A "damp" community is one in which the import and sale of alcohol is regulated, usually according to a monthly quota per adult, and where consumption is limited, for example to consumption by adults in private households, but not permitted in public buildings or public areas. In a "dry" community, such as Nuiqsut today, the importation and possession of alcohol is prohibited.

The working environment

According to our interviews with many ConocoPhillips and contractor employees, employment conditions and benefits at Alpine are impressive. The wages and benefits including health insurance are good, and some sub-contractors including several Kuukpik Corporation subsidiaries are popular because of their advantageous health plans.

In the late nineties, we interviewed many oilfield employees – Native and non-Native – at Prudhoe Bay, Kuparuk and Alpine. According to their testimony, during the early years of the North Slope oilfields (1970-1990) working conditions were tough. Not only was the concept of workplace health and safety less cultivated by employers and employees alike, but working atmosphere was harsh. Already in the late nineties, our interview subjects could tell us that things had changed dramatically. Better technologies, tools and protective clothing had improved working conditions and the "cowboy mentality" so characteristic of the pipeline construction years in the seventies was already a thing of the past.

At the same time, fifteen years ago, many Alaskan Natives told us that they had experienced discrimination when working in the oilfields – both direct discrimination because of their ethnicity and culture, but also a general feeling of being unwelcome and uncomfortable in a working environment that was so different to the communities from which they came.

In many ways, the positive changes that have taken place in the oil industry in the past fifteen to twenty years also reflect the general trends in American workplace culture. There is greater acceptance of ethnic diversity, and today women enjoy better working conditions throughout US industry, both because of new laws against sexual harassment in the workplace and also because of a general cultural trend in America whereby women have achieved better training, employment opportunities and recognition in the workplace.

In our discussions with several managers and leaders at Alpine, it was clear that both ConocoPhillips and its many contracting companies have a zero-tolerance attitude to all forms of discrimination in the workplace.

All managers with whom we spoke were particularly sensitive to the question of showing respect to the local population, whether they be employees or guests at Alpine. Our own experience of this, from the time we spent both in Nuiqsut and at the Alpine camp supports this testimony.

Notwithstanding these tangible positive trends, it is still the perception of many Nuiqsut residents, that they are subjected to discrimination when working for the oil industry. Further discussion usually revealed that the problem areas are typically those operations that are outside the Alpine camp – such as the winter-season ice-road construction crews, many of whom are itinerant workers with little previous experience of Alpine or the local community. But even here, it was obvious that discrimination, when reported or seen by the managers, is not tolerated.

It is on issues such as this, that Native perceptions are particularly important, even when such perceptions can be distinguished from the fact. For all its flaws and fault-lines, Nuiqsut is a tightly-knit community in which the Iñupiat residents are the majority culture. Given that one of their cultural values is the avoidance of conflict, it is clear that many Nuiqsut residents, when feeling discriminated against, unwelcome or just "left-out" by their non-Native work colleagues, simply avoid the conflict and stay away, often in situations where other ethnic minorities in the workplace would complain and seek fair-play.

ConocoPhillips and several contractors have worked hard to ensure a sound professional and social integration of Nuiqsut residents into the workplace at Alpine. This has been most successful in the case of employees who have completed an internship or craft training and who have thus achieved a position of responsibility at Alpine.

As we have outlined earlier, Native-owned contracting companies, such as Doyon Drilling, that have a priority of shareholder hire are generally more successful in creating and maintaining a workplace in which Native employees feel comfortable and can succeed.

These issues are difficult to document with statistics, not least because the number of Nuiqsut residents who have achieved full time skilled employment at Alpine is so low as to give no reliable data sample. Thus we can only rely on the anecdotal testimony of both employers and employees.

Creating employment and training opportunities for North Slope residents has been a priority for the oil industry for many years, not least because the North Slope Borough, ASRC and the village corporations also have this as a priority in their regular dealings with the oil industry. Each year, usually in preparation for the winter construction season, ConocoPhillips and many of the major contracting companies, hold job fairs in the North Slope villages, including Nuiqsut, to recruit local people for employment at Alpine.

Similarly, ConocoPhillips includes recruitment initiatives as a regular item on the agenda for the frequent community meetings that are held in the village to inform the community about forthcoming exploration and construction activities. ConocoPhillips' Village Liaison Department maintains a regular dialogue with all eight communities of the North Slope, though due to the proximity of Alpine to Nuiqsut, the relationship with this community is given particular attention.

Most employment opportunities for which Nuiqsut residents are adequately trained are in seasonal construction work. Few adults from Nuiqsut have the training and skills necessary to fill permanent jobs at Alpine, most of which require craft training that is not available in the village. Most Nuiqsut residents prefer seasonal work as it allows them to maintain their subsistence activities and other civic responsibilities for the rest of the year.

It is clear that the creation of year-round, skilled jobs for Nuiqsut residents at Alpine requires training and in some cases work experience that is not available in Nuiqsut. In cooperation with the community, ConocoPhillips has established the "Career Quest" program, whereby teenagers from Nuiqsut Trapper School have the opportunity of gaining work experience at Alpine in their last school years.

Nuiqsut residents employment at Alpine 2002-2014

Year	CPAI year round	CPAI seasonal	Contractors year round	Contractors seasonal	Ice road labor	Alpine interns
2002	0	0	0	no data	10	0
2003	0	0	0	no data	10	0
2004	0	0	0	no data	10	2
2005	0	0	0	no data	10	2
2006	1	0	2	no data	10	1
2007	2	0	2	no data	6	2
2008	2	0	4	no data	6	1
2009	2	0	2	no data	6	1
2010	2	0	2	no data	8	3
2011	2	0	2	no data	8	4
2012	2	0	3	no data	8	7
2013	2	0	4	no data	12	6
2014	3	0	4	2	12	6

Note:
Alpine also funds an Employment Coordinator position at Kuukpik Corporation as well as funds the Executive Director position for KSOP. Also CD-5 construction provides recent numbers of construction employees. Contractor employment numbers are not tracked consistently or records kept.

Source: ConocoPhillips Alaska Inc., Village Liaison Department, 2014

The Career Quest program gives these young people the chance to see a wide range of employment opportunities and seeks to inspire them to consider a training internship in which they can be trained for a trade that may subsequently enable them to seek permanent employment at Alpine, but which in any event will also equip them for seeking further training and employment elsewhere.

Kuukpik Corporation also offers educational scholarships to any young person Nuiqsut who wishes to seek a further education outside the village, in the hope that some of those who may complete such an education will bring their skills back to the village in the future. ConocoPhillips covers 50% of the cost of such scholarships.

There is no easy route to creating permanent skilled employment opportunities for Nuiqsut residents. With less than ten students graduating from the Trapper School each year, the dynamics of a small community make rapid change and progress difficult, and in some respects, undesirable. Many of the young people do not want to leave the village , but prefer to remain with the families and friends, and maintain the subsistence way of life which their Iñupiat values have taught them to be so important.

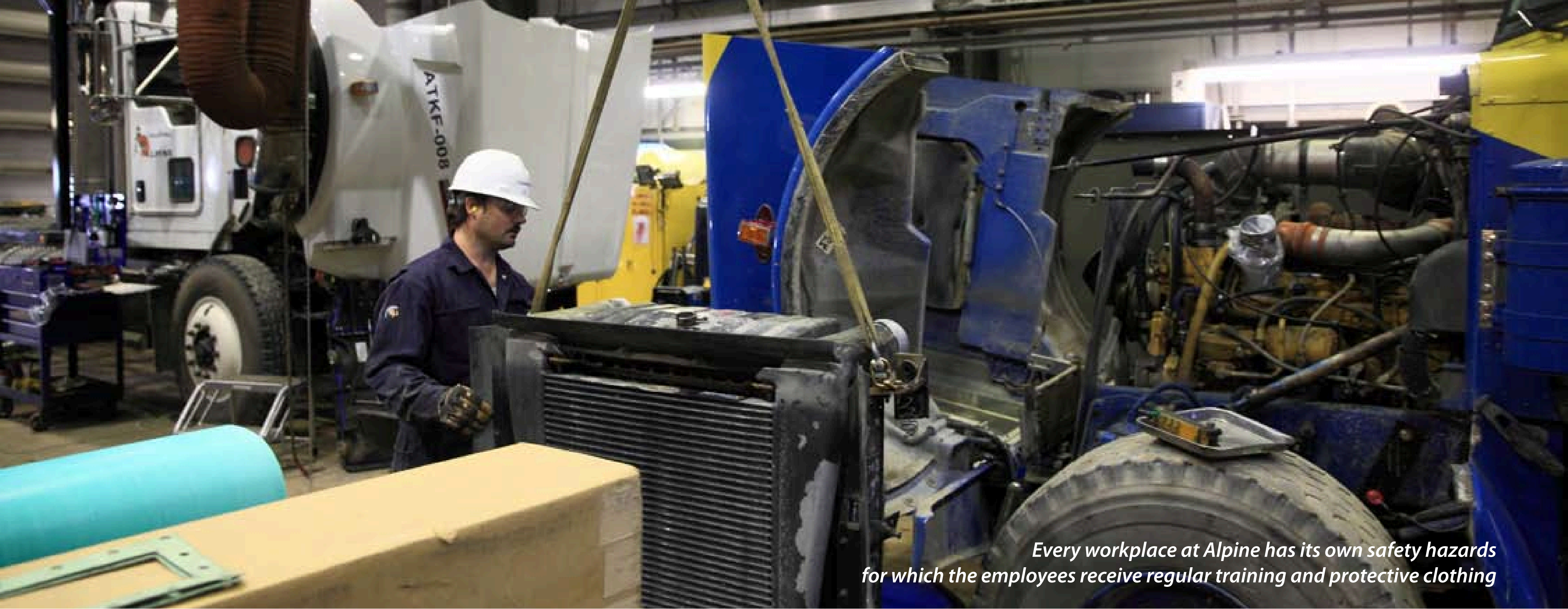
As rural communities in other parts of the world have experienced, a sudden growth of educational and employment opportunities that takes many young people away from their village leaves the community without the human resources necessary to maintain the traditional way of life. Industrial employment targets mainly the male population, the same population group which the community primarily relies on for its subsistence hunters. While some employees might work full time at Alpine and remain resident in the village, there is also the possibility that some will choose to relocate to other urban parts of Alaska where their families may enjoy better employment and educational opportunities, thus removing them from the pool of regular subsistence hunters in the community.

Perhaps the most important goal with regard to employment and training opportunities, for both Kuukpik Corporation and ConocoPhillips, is opportunity - giving the young people the choice of a future, so that those who choose to remain in the village are not doing so simply because there is no alternative. In this respect it is important to recognize, that the choice to pursue a subsistence lifestyle rather than industrial employment is also an important opportunity on which the future of Nuiqsut will depend.

That ConocoPhillips and Kuukpik Corporation have each created opportunities for the local people which did not exist before Alpine, is testimony to the progress achieved during the past decade and may well become an important factor in maintaining a future for the community as a whole.

There are many opportunities for heavy equipment operators at Alpine

The Career Quest program gives many young people from Nuiqsut the opportunity to experience the working environment at Alpine



Every workplace at Alpine has its own safety hazards for which the employees receive regular training and protective clothing

Workplace health and safety and environmental protection

Although Alpine and the other North Slope oilfields are hundreds of miles away from urban society, the oil industry has a high media profile throughout the United States on issues such as workplace health and safety and environmental conservation. In the event of any accident or incident, the isolation of the oilfields offers little protection from public scrutiny and criticism. Both federal and state regulatory agencies require immediate reporting of any accidents and incidents and the regional entities such as the North Slope Borough and the land-owning ANCSA regional and village corporations also insist on transparency on such issues.

The oil industry in Alaska has long-since recognized that workplace health and safety and the protection of the environment and not merely regulatory requirements but also essential performance indicators for the industry in maintaining its relationship with its employees and the public at large.

While some accidents and incidents do occur, it is obvious to all concerned, that the cost of mitigating and minimizing these is far less than the cost of dealing with the bureaucratic, legal and public-relations consequences of any accident or incident.

The workplace health and safety track record of the North Slope oilfields in general is good, and the track-record at Alpine is particularly impressive, not least due to the unique conditions in the Colville River Unit. While questions regarding the long-term strategy, exploration, production and capital investment at Alpine are primarily managed by ConocoPhillips executive staff in Anchorage or Houston, the day to day operation of the field is managed locally. At the time of our fieldwork visits in 2013, the Alpine management team comprised Steve Ovenden, Manager for ConocoPhillips Western North Slope Operations, with Mike Rodriguez and John Murry as the Alpine Operations Support Superintendents. Mike Rodriguez and John Murry are alternates, sharing the daily management of Alpine on a two or three week rotation, and both have worked at Alpine for a number of years.

As Mike Rodriguez explains, *"Health and safety is our number one priority here at Alpine. Of course we're here to make money for the company and to produce oil, but that is not in conflict with our health and safety goals, because it makes sound business sense to ensure that everyone arrives here healthy and goes home safe to their families when their two or three weeks are over".* In contrast to many industrial workplaces, where health and safety regulations are seen as inconvenient rules by many managers and employees alike, the prevailing attitude at Alpine is one of concern for the well-being of fellow employees, it is a vital aspect of the "Alpine Spirit" which managers like Mike Rodriguez have worked hard to maintain and of which they are clearly proud. *"We look out for each other here. It is every employee's responsibility to take care of him- or herself and to watch out for his or her colleagues, a sort of 'buddy system', which we try to maintain and which we encourage employees to see as part of the fun of their work, with regular safety training and competitions in which employees can win prizes and recognition for their health and safety efforts,"* adds Mike Rodriguez.

Behind the daily culture of workplace health and safety team-building events there is a well-structured plan for health and safety at Alpine. For every job or assignment, there is a handbook which stipulates which training and tests employees must complete before being assigned to such work. For every work area, there are strict rules defining how different jobs are to be undertaken and how the "chain of command" for authorizing and accepting responsibility for all work is organized.

All employees are part of a LEAN-inspired work team for their work area, and each work day begins with a safety meeting, at which all safety issues regarding the day's work are discussed and where each employee can ensure that his or her health and safety at work is taken into consideration. Besides addressing obvious safety issues such as the planning of maintenance work in concealed areas, the use of flammable or abrasive tools in hydrocarbon areas or the safe disconnection of electric power or high pressure gas or liquids prior to plant maintenance, such briefings also address comparatively banal issues such as the use of protective clothing, the maintenance of tidy work areas and the correct use of company vehicles when traveling on the tundra roads. It is the experience of Alpine, that the major gains in workplace health and safety are to be made on simple everyday issues, such as hand-protection, cold weather clothing, toe-protection, and simple hygiene. All employees, including visitors, who are scheduled to stay overnight at the Alpine facility receive a safety briefing on arrival, and the company supplies protective clothing for all.

Alpine has a well-equipped and well-stocked health clinic, with on-site EMT staff supplemented by additional employees such as security-personnel and firefighters who are also trained in basic first-aid and emergency procedures. However, the clinic is not a hospital, and any cases of injury or illness are transferred, if necessary by medical evacuation, to hospitals in Anchorage or Fairbanks where comprehensive medical care is available.

Perhaps the greatest health hazard at Alpine and similar industrial sites is that of simple everyday bacterial or viral infection, a hazard that the management at Alpine are keen to reduce. The bringing together of between 300 and 600 people, who travel, work and live closely together, and during the winter months when the camp is most populated, spend a lot of time indoors in a well-heated camp, is a perfect environment for the spread of infection, with the potential to affect a large proportion of the workforce. Such incidents, besides being bad for employee welfare, wreak havoc with the planning of work rotations and can be very expensive. Therefore particular attention is paid to personal hygiene with liberal use of hand-spirit dispensers throughout the facility and measures to ensure that employees who arrive with sickness or develop illness during their stay at Alpine are sent home to recover.

Due to its isolation, Alpine must be completely self-sufficient with regard to dealing with emergencies such as fires, industrial accidents, and chemical or oil spills. The primary strategy is one of mitigation, with safety rules and regular monitoring, both by technical measures and human inspection, to reduce the risk of such events. The design of the facilities supports this end, with the accommodation and general workshop areas being well isolated from the more hazardous production processing facilities, to which human access is strictly limited to authorized and trained employees.

Alpine has a fully equipped fire hall, with modern vehicles and firefighting equipment and skilled firefighters that can match most urban fire departments, and with specialized equipment and training to deal with the special hazards of a petrochemical environment. Besides the full-time firefighting crew, many key employees are also trained as firefighting auxiliaries, with skills such as working with breathing apparatus and first-aid, to be able to supplement the regular crew in the event of a major emergency.

The Alpine Fire Department is also a popular workplace for Nuiqsut residents, several of whom have experience from the volunteer fire department and search and rescue unit in the village. In recent years several Nuiqsut residents have completed internships at the Alpine Fire Department, enabling them both to work as firefighters at Alpine and become better trained for their volunteer responsibilities in the village. In common with many rural communities in the US, a position in the Fire Department, even as a volunteer, earns the respect of the community and the colleagues with whom one serves. The Alpine Fire Department crews hold regular drills together with their colleagues from Nuiqsut where they practice various forms or firefighting and rescue techniques.

There are several overlapping and integrated strategies for preventing and handling incidents which could harm the local environment. Together with other staff, the Alpine Fire Department is part of a standing spill response team that undertakes both inspection and clean-up of any spills. There are also specialist companies, such as Alaska Clean Seas, that undertake specific monitoring and inspection operations, and also form a part of the overall spill response strategy for the Colville River Unit. Also, every employee at Alpine is responsible for many everyday aspects of spill prevention, under the supervision of their departmental managers and the Alpine security team, whose crews patrol the entire oilfield daily.

At Alpine any spill or drip of oil or chemicals onto the pads or tundra, even a small drip from a vehicle oil sump, is considered a reportable incident and is subject to reporting, inspection and evaluation after the spill is cleaned up.

There are many practical strategies to reduce the risk of spills – all vehicles are equipped with a portable drip tray, which must be placed under the engine when the vehicle is parked for any length of time, and larger vehicles such as trucks are equipped with a permanent drip sheet under the engine, to contain any spills.

Finally, as we shall describe in a subsequent chapter, there is the Kuukpikmiut Subsistence Oversight Panel (KSOP), a team of Iñupiat hunters from the community who are paid by ConocoPhillips as subsistence representatives to patrol the oilfield – also the less accessible areas on the tundra where few oilfield employees venture but where hunters regularly travel. KSOP is "the eyes and ears of the community", an initiative set up between ConocoPhillips and Kuukpik Corporation, and operated independently of both, whereby the community has an active role in monitoring and protecting the environment on which their subsistence way of life depends.

Besides these aforementioned proactive measures to ensure workplace health and safety and to protect the environment, there are also a range of security measures in place to ensure that only those authorized have access to the oilfield and the surrounding tundra. Nuiqsut residents have access to the entire tundra and waterway areas off the roads and pads for their hunting activities, although, for safety reasons, the release of firearms when hunting is prohibited within 1000 yards of any pipeline or facility. The hunters may also use the winter ice roads for access to their subsistence hunting areas. Access to the oilfield road system (including the winter ice-roads within the oilfield) and the pads and facilities is strictly controlled and security staff patrol and monitor the field continuously. This is not only a matter of commonsense in a potentially hazardous industrial workplace; it also recognizes the importance of the North Slope oilfields and pipelines to national security. Despite the isolation of these oilfields and that unwelcome visitors are few and far between, those who do appear are usually discovered and promptly escorted out of the area.

The crew of Doyon Rig 19 are proud of their exemplary safety track record

Scientists help local hunters check their nets on the frozen Nechelik Channel in a blizzard in November 2013

Scientific studies and monitoring

The stringent permitting regulations for oil exploration and development in Alaska have ensured that the oil industry has for decades funded many scientific studies covering wildlife, wildfowl and fisheries, hydrology, tundra flora and morphology, air and water quality, as well as the socio-cultural issues relating to industrial land use and development. Besides such studies, most of which have been undertaken by independent research teams, the state and federal governments have also conducted many parallel studies. Last but not least, the North Slope Borough Department of Wildlife, which has a clear brief to protect and promote the subsistence resources of the region, has also conducted many scientific studies. The Colville Delta is thus perhaps one of the most well-studied and monitored environments in the State of Alaska. It is normal that when conducting scientific studies that relate to subsistence resources or Native-owned land that the scientists undertaking the work do so in close cooperation with the local community.

The North Slope Borough Department of Wildlife in particular has a long track-record for combining traditional knowledge with scientific research and observation. Little industrial activity can take place on any land on the North Slope without falling within the jurisdiction of the Native communities. Even activities on state and federal lands fall within the jurisdiction of the North Slope Borough. Similarly, the regional and village corporations, ASRC and Kuukpik, have a high degree of control and insight into industrial activities on these lands. In comparison to rural population groups in other parts of the world, the Iñupiat have achieved a unique level of control and influence over their natural environment. Such regulatory powers and resources have obviously evolved somewhat in the past 40 years, but even in the first years of Nuiqsut, industrial activities were subject to requirements for both baseline studies and periodic monitoring to ensure that possible impacts to the environment, wildlife and population were identified and mitigated.

Scientific studies on the North Slope fall broadly into three categories – firstly, studies commissioned by state or federal agencies and often undertaken by scientists working directly for such agencies; secondly, studies commissioned by industry as a prerequisite of the various permitting processes, or as a contractual obligation to either regulatory agencies or other stakeholders such as the North Slope Borough or the land-owning regional and village corporations, during continued exploration and production activity; and thirdly, scientific studies undertaken by scientists from academic institutions. Some of the studies undertaken by scientists attached to the North Slope Borough Department of Wildlife fall into this third category, although many of the departments studies are also funded by the borough as part of its ongoing wildlife protection program.

Although these three categories of scientific study differ with regard to the source of funding and the ability of the funding body to define the scope of the research, it is true to say that many scientific studies on the North Slope are driven by the oil economy. Some studies provide base-line data, against which the results of future studies undertaken in conjunction with specific industrial activities may be measured; while many studies, particularly those related to wildlife and wildfowl and the complex hydrology of the Colville Delta, have been conducted for many years and provide a valuable insight into the state of the environment and its wildlife populations over a longer period.

There are also a number of continuous air and water quality monitoring programs to ensure that any changes in local air or water quality are discovered.

In the event of spills or similar incidents, special studies and monitoring programs may be implemented to track possible impact or changes.

Objective scientific study of the natural environment and wildlife on the North Slope is complicated by the sheer size of the region and the considerable logistic and practical challenges involved in studying species that by their nature are migratory and easily disturbed by human activity. Studies of aquatic species, particularly migratory fish are also difficult, because of the uncertainty involved in determining a representative sample of the population under study. Most scientists with whom we have spoken admit that with the best methods and technologies, one can but scratch the surface of available knowledge.

Because most wildlife studies are undertaken as a requirement for development permitting, the focus has naturally been on those species that are of importance in terms of subsistence, or those species or phenomena that are reliable indicators about the state of the environment on which the wildlife and humans depend.

Those studies which focus on subsistence wildlife rely to some degree on the cooperation of the local population, as the hunters have both the traditional knowledge and a continual presence on the tundra which few scientific programs can match. Some studies – for example studies of fish and marine mammals – rely heavily on harvest data from local hunters, and it is often the hunters who supply the fish samples that are subjected to study and analysis. Individually and collectively through village entities such as the Native Village of Nuiqsut, the hunters make an important contribution to such studies and many Nuiqsut residents value the scientific knowledge gained about their important subsistence species. Some studies have been running for many years, and the scientists conducting these studies have gained the trust of the community.

Because of the work of the North Slope Borough Department of Wildlife, based in Barrow, there is a long tradition for the marriage of traditional Iñupiat knowledge and scientific study. In particular, scientists working for the Borough are seen by the local people as allies. But not all scientific activities are embraced or understood by the local population, not least because the level of scientific activity, which naturally often takes place simultaneously with the major subsistence activities, can be an irritation and in some cases a direct annoyance to the local hunters if study activity on the tundra and its related transport operations risk disturbing the subsistence wildlife. Some study programs, such as the hydrological monitoring during the spring flood season, necessitate repeated data gathering from many locations, for which helicopter transport is necessary. Such studies, when commissioned by ConocoPhillips, are stringently planned in close cooperation with the hunters to ensure that helicopter flights are kept to the minimum and that the hunters are aware of the schedules for these.

A helicopter at Alpine in 2013

Although most Nuiqsut residents with whom we discussed this subject seem to agree that scientific studies are a good idea, it is also clear that many citizens express a desire for greater insight into the results of such studies, as they feel that this might benefit the community. We are not aware of to what extent reporting of the study results to the community is systemized, but this might be an area which should be addressed in the future.

It is only natural that the Iñupiat people, who harvest a major proportion of their food by subsistence hunting, have concerns about the health of the fish, fowl and wildlife they eat. The subsistence year is a recurring cycle of migrations, where specific fish, birds and animals normally return to the same places at around the same times of the year. Any changes to these patterns, or to the apparent health of the creatures harvested, will obviously be a cause for concern, and will naturally often be attributed to external causes.

In this respect, the oil industry will often be the focus for any concern, even when a change in migration or animal, fish or fowl health may be unrelated to oil industry activities. For this reason, scientific studies, both ongoing studies and those initiated in response to any particular problem, are a vital measure by which the oil industry often can be given a "clean bill of health". In the event of a sudden problem, such as that we experienced in 2013 when the local fishermen began seeing a considerable number of fish with mould infections, it is usual for scientists from state or borough agencies to be called in to give an independent opinion, even when the fish population in question is already under ongoing study by independent scientists under contract to the oil industry.

The aforementioned incident was quickly diagnosed as a case of a particular aquatic mould, a skin growth also seen in salmon species in other regions. Why it appeared in the Colville River Delta remains unanswered, though scientists are examining questions such as minor seasonal changes in the salinity, oxygen content or temperature of the water as possible factors.

Despite the fact that the scientific team working for ConocoPhillips are both highly experienced and well-respected for their professional objectivity, and their findings were duplicated and confirmed by other scientists from other agencies independent of the oil industry, the village of Nuiqsut was quickly rife with rumor and conjecture about pollution from industrial activity at Alpine being the cause of the problem. In such an event, many citizens express the opinion that scientists working for, and being paid by the oil industry may not be totally objective in their study of such problems.

Such events underline the importance of a continued dialogue between scientists, the oil industry and the community. According to many scientists with whom we have spoken, the biotope of the North Slope is continually subject to change. Minor changes in climate, average temperatures or precipitation, or water salinity in the Beaufort Sea, can impact the fish, fowl and wildlife in many ways which as yet require further study. Therefore the oil industry has a vested interest in maintaining a level of scientific study to inform and prepare the local population, and to document the ecological viability of the industry's activities.

Over several decades, the oil industry in Alaska has become a vital and active participant in the quest for scientific knowledge about the environment and wildlife of the tundra. Although mostly a regulatory or contractual obligation, it is still one which the oil industry has embraced and shown its commitment to. The support of scientific study, both in the field on the North Slope, and through grants to the University of Alaska, is today an important Corporate Social Responsibility (CSR) indicator for ConocoPhillips.

A biologist from Alaska Biological Research monitors the whitefish harvest

A day's harvest of whitefish from the ice fishing, November 2013

Future exploration and development

As Alpine nears its fifteenth year of production, the productivity of the field is falling. Though occupying approximately 165 acres surface area on four drill sites, the Colville River Unit with its directional drilling approach has tapped into an oil reservoir that encompasses approximately 25,000 acres of the subsurface. Production from and maintenance of existing wells will continue for the foreseeable future, aided by new technologies which enable extraction of oil beyond the limits of economically viable production originally envisaged.

For ConocoPhillips, the long term viability of the Alpine field lies not only in the existing wells. Given that future oil development in the region will likely have to pursue a minimal footprint on the tundra , Alpine is an important bridgehead for new exploration and production, particularly in areas west of the Colville River, in the North Eastern part of NPR-A.

Several exploration wells have been drilled here in the past fourteen years, and any production from these will depend on Alpine for logistical support, processing and connection to the pipeline.

ConocoPhillips is not the only oil company active in the areas outside the Colville River Unit, but given the current level of leasing and exploration investment, it seems likely that ConocoPhillips Alaska will remain the major operator in the region.

Although some of the new oil pools lie outside Kuukpik land, the expected growth of exploration and production in the region will continue to offer employment and business opportunities and other benefits to the community of Nuiqsut. These are discussed in the following chapters.

An Alpine tanker truck crosses a bridge on the CD-5 road 2015

The four-wheeled ATV is a popular means of transport in the village - even for the young people

Demographic overview

Nuiqsut today is a far cry from the tent city of 1973. After forty-one years the village has become a permanent community, with housing, public utilities such as water and sewer plants, a power plant, a natural gas plant, a well-equipped Department of Municipal Services depot (operated by the North Slope Borough) that manages public utilities and road and airport maintenance, as well as a modern K12 school, a health clinic, an elders' center, a teen center, a small post office, a police station, a fire hall, a volunteer search and rescue facility and a fuel depot.

There is also a general store, a hotel and the head office of Kuukpik Corporation as well as a City Hall which includes the mayor's office, a community center, and village offices for the North Slope Borough and ConocoPhillips village liaison. Kuukpik Corporation's contracting company Nanuq, also has a maintenance workshop in Nuiqsut.

The Native Village of Nuiqsut (NVN) also has an office in the village and there are two churches serving two congregations.

Since 1973 Nuiqsut has grown from a primitive village inhabited by a few closely related families to become a modern Alaska rural community with all the facilities and institutions that one can find in any typical American small town. Here, where the subsistence culture meets the cash economy, the citizens continue to work together, though on more levels than in earlier years. There are the parallel bonds the family household, the extended family and the entire community; together with the often overlapping bonds and alliances shared by people who may have the same workplace or may work together in one of the many village entities., or may be part of the same Nuiqsut generation.

Over four decades of building this village have given the community a rich culture which they are able to share and reaffirm in many aspects of village life.

Nuiqsut remains an extended family in which the elders and the children play as vital a role as the adults who are active as hunters or workers.

Aerial view of Nuiqsut from the south. The tent city of 1973 was located on the tundra to the east of the road on the right in this picture, above the flood plain

Facing page
Images of everyday life in Nuiqsut

STOP

For the past fifteen years, the population of Nuiqsut has remained stable at over 400 people, over a quarter of whom are under 20 years old, and less than 40 are over 60 years old. The active adult population, that includes both the workforce and the core of the subsistence hunters, amounts to 223 people – 116 male and 107 female.

NUIQSUT POPULATION BY AGE AND SEX			
	Total	Male	Female
Total	402	208	194
Under 5 years	53	29	24
5 to 9 years	32	15	17
10 to 14 years	13	8	5
15 to 19 years	44	25	19
20 to 24 years	57	29	28
25 to 29 years	38	21	17
30 to 34 years	14	10	4
35 to 39 years	10	6	4
40 to 44 years	30	9	11
45 to 49 years	36	16	20
50 to 54 years	22	13	9
55 to 59 years	26	12	14
60 to 64 years	13	4	9
65 to 69 years	15	8	7
70 to 74 years	4	2	2
75 to 79 years	3	1	2
80 to 84 years	2	0	2
85 years and over	0	0	0
MEDIA AGE AND POPULATION OF SELECTED AGE GROUPS			
Media age	25.2	24.8	25.8
Population 16 years and over	303	155	148
Population 18 years and over	288	149	139
Population 21 years and over	249	126	123
Population 62 years and over	30	13	17
Population 65 years and over	24	11	1

Source for this and the following four tables : US Census 2010
see State of Alaska Department of Labor and Workforce Development website

NUIQSUT POPULATION BY RACE		
Population of one race		
Population of two or more races		
	Race alone	Race alone or in combination with one or more races
White	40	50
Black / African American	1	3
American Indian / Alaska Native	350	360
Asian	0	0
Pacific Islander	0	0
Other	0	0

The data for population relationships and households and households illustrate the ties between generations and the housing shortage.

RELATIONSHIP	
Total	402
In households	396
Householder	114
Spouse	40
Child	155
Own child under 18 years	76
Other relatives	49
Under 18 years	34
65 years and over	0
Non-relatives	38
Under 18 years	4
65 years and over	0
Unmarried partner	23
In group quarters	6
Institutionalized population	0
Male institutionalized population	0
Female institutionalized population	0
Non-institutionalized population	6
Male non-institutionalized population	0
Female non-institutionalized population	6

HOUSEHOLDS	
Total	114
Family households (families)	84
With own children under 18 years	40
Husband-wife family	40
With own children under 18 years	17
Male householder, no wife present	15
With own children under 18 years	9
Female householder, no husband present	29
With own children under 18 years	14
Non-family households	30
Householder living alone	24
Male householder living alone	14
65 years and over	2
Female householder living alone	10
65 years and over	3
Households with children/elders	
Households with individuals under 18 years	57
Households with individuals 65 years and over	22
Averages	
Average household size	3.5
Average family size	3.9

It should be noted that census statistics for small Alaska rural communities are often unreliable. While the 2010 US Census estimates the Nuiqsut population at 402 persons, the North Slope Borough estimate for the same year is 455 persons.

One may assume that the NSB Census figure is the most reliable, in that their data is able to draw on a wider variety of public sources from each North Slope community.

Nuiqsut housing units on Nigliq Street mostly built in the early eighties.

Housing

Of the 136 housing units in Nuiqsut, 114 were occupied at the time of the 2010 US Census. Most of the houses are of timber frame construction, on pilings above the tundra, built during the seventies and eighties. The census figures for average household size (between 2.9 and 4.0 persons per household) is an average – there are many households comprising only one or two adults, just as there are many households with several generations living under one roof. By modern standards, many of the houses are poorly insulated, in need or maintenance and have a poor indoor environment due to the climate and heating methods – though the recent introduction of natural gas for heating homes may have mitigated this issue to some extent.

The cost of building and maintaining housing in Nuiqsut is much higher than in the urban communities of the south. Factors such as transport costs, the cost of outside construction labor, the cost of building for an Arctic environment, and the climate under which construction and maintenance must take place all contribute to the high cost of housing. For Nuiqsut residents, many of whom rely on subsistence and seasonal employment, the ability to get a mortgage is more limited that in urban areas.

That there is a lack of housing in Nuiqsut is supported not by the census figures for the number of vacant units, but more by the number of households in which several generations must share a small house, often without individuals having their own bedroom. According to those residents with whom we discussed this subject, it is particularly difficult for young adults to establish their own household, both due to the lack of suitable housing, and the lack of economy to finance such a household. This situation is typical for most rural Alaskan communities.

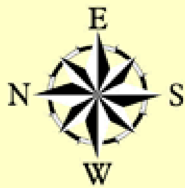
While there are some state and federal programs for housing in rural areas, there is as yet no entity within the community that is suitably geared to managing the funding, construction and administration of private housing.

The irregular nature of the economy of many Nuiqsut households is a significant obstacle to any local entity taking on such a responsibility, as the leaders are all too aware of having to face the problem of residents who cannot pay their rent or mortgage at times when they do not have employment income.

According to available data, there are currently between five and seven new houses under construction in Nuiqsut (2014). Funding for these has been made by the Barrow-based Tagiugmiullu Nunamiullu Housing Authority (TNHA).

HOUSING OCCUPANCY	
Total	136
Occupied housing units	114
Vacant housing units	22
For rent	9
Rented, not occupied	0
For sale only	1
Sold, not occupied	0
For seasonal, recreational, or occasional use	2
All other vacant units	10
VACANCY RATES	
Homeowner vacancy rate (percent)	1.6
Rental vacancy rate (percent)	14.5
HOUSING TENURE	
Owner-occupied housing units	61
Renter-occupied housing units	53
Population in owner-occupied housing units	242
Population in renter-occupied housing units	154
Average household size in owner-occupied housing units	4.0
Average household size in renter-occupied housing units	2.9

See the following pages for photographs of typical housing units in Nuiqsut as seen in 2013-2015.



NUIQSUT ALASKA

NUIQSUT AIRPORT
NUI / PAQT

Baseball field

Lagoon Tract

Kuukpik Commercial Sub Tract 1 (HOTEL)

Kuukpik Commercial Sub Tract 2

Cemetary Tract

Municipal Reserve

Nuiqsut Community Service Center

Nuiqsut Trapper School

Adrian Redmond / Channel 6 Television Denmark April 2013
from North Slope Borough original

Nuiqsut City map - based on North Slope Borough original, redrawn 2013 for this report

Examples of housing in Nuiqsut (2013 - 2015)

CHEVROLET

Community entities

The administrative, political and community affairs of the village are organized and administered through several entities in which most of the population are members or are represented.

There are three entities of primary relevance within the village:

The City of Nuiqsut

Established in 1973 under state law, the City of Nuiqsut is the democratic institution that represents and administers many of the public affairs of the community. The city council is elected from the general adult population and all residents, including non-Iñupiat are represented and eligible for office. It is however true to say that most outsiders resident in the community abide by an unwritten understanding that they should not be too vocal in local affairs.

The City Council has an elected mayor as well as a few office staff, some of whom specialize in cultural affairs. The City Council, through regular elections and ballot-options, decides on questions such as the status of the community with regard to the importation and consumption of alcohol, the management of bingo and the curfew for children during the long summer months.

The City also has responsibility for many public affairs such as the graveyard, the annual clean-up and the management of the Kisik local community centre, which shares the city hall building and where many public meetings and community events are held.

The City of Nuiqsut is a party to the tri-partite agreement between village entities regarding the negotiations by Kuukpik Corporation with the oil industry on behalf of the community.

Unlike other urban city municipalities, the City of Nuiqsut has few responsibilities for the technical infrastructure of the community - in Nuiqsut these are the responsibility of other entities, such as the North Slope Borough.

By agreement with the other village entities and the oil industry, it is the City Council that assumes responsibility for channeling the money from several mitigation funds established under the terms of surface use agreements between Kuukpik Corporation and the oil industry, to compensate villagers, particularly hunters, for the impact of oil development on their subsistence activities. These funds provide, for example, payments of fuel vouchers for the extra transport involved in traveling further to hunt the wildlife, the migration routes of which might have changed or moved due to recent industrial activity in the Colville Delta.

The City Council has jurisdiction over approximately nine square miles of land, the boundary descriptions of which were filed in 1975 and subsequently corrected in 1976.

Besides housing the mayor's office the city hall also functions as the focal point for most public meetings and celebrations as well as regular community activities.

The Native Village of Nuiqsut (NVN)

The Native Village of Nuiqsut (NVN) is the federally recognized tribal government for the Iñupiat community of Nuiqsut, and as such is the entity through which the village (the tribe) has access to many federal support programs that target Native American communities. As a tribal government, NVN has jurisdiction over its members on a range of administrative and legal issues such as domestic affairs and probate law[38]. While the State of Alaska has moved some way in recent decades towards recognizing and working with tribal governments in the State, it is the longer established "government-to-government" relationship with the federal administration that provides the constitutional basis for the NVN.

Although most if not all Iñupiat Nuiqsut residents are members of the tribe, it is the hunters who make up its most vocal and active membership and leadership, and while not being strictly a "subsistence hunters' organization", it is often on issues relating to subsistence that the tribe is particularly vocal. Though essentially separate from the Kuukpikmiut Subsistence Oversight Panel (KSOP), the NVN membership is active in the operation of KSOP[39] and shares many overlapping interests.

Though neither by constitution nor design, the NVN has become, in recent years, the village entity through which dissent or disagreement on oil development is expressed. This alignment reflects both the natural concerns of many hunters, who remain skeptical about industrial development and the potential impact on their subsistence resources and way-of-life; and the personalities and kinship alliances of the most vocal members and leaders. As a consequence of this alignment, there has been tension between NVN and Kuukpik Corporation for several years, leading to NVN establishing an alliance with outside environmental organizations, which have their own agenda for opposing oil development in the Colville Delta region.

KSOP meets regularly with the oil companies to avoid possible conflicts between oilfield operations and subsistence activities

The substance of the tension between NVN and Kuukpik Corporation is not within the scope of our brief for this report, neither is it a subject which most Nuiqsut residents feel comfortable discussing with outsiders such as ourselves, but it would be an omission on our part as researchers not to draw attention to the importance of this issue on the current dynamics of the community and thus the unity with which the community can deal with current and future challenges.

NVN office, Nuiqsut

[38] Under federal law, it is up to each Tribal entity to determine the extent of tribal law that it wishes to control. We have not been able to determine the extent to which NVN has implemented any such programs. This is possibly a subject which should be covered by further study.

[39] The KSOP board of management includes two representatives appointed by NVN, two by the City of Nuiqsut, two by Kuukpik Corporation and one community representative elected at large.

Kuukpik Corporation

Established under ANCSA in 1973, Kuukpik Corporation is the custodian of the lands and funds awarded to the Kuukpikmiut of Nuiqsut under the act and, particularly since the discovery of Alpine, has become the locomotive for the business and economic development of the community.

Because all the original settlers in 1973 were enrolled as shareholders in Kuukpik Corporation, the corporation has become synonymous with the community as a whole, despite the demographic changes in recent decades whereby many of the residents of Nuiqsut are not themselves Kuukpik Corporation shareholders.

To a great extent, this development was recognized and anticipated by the community in the early nineties, when it was decided through a tri-partite agreement between the City of Nuiqsut, NVN and Kuukpik Corporation, that it would be the corporation that would represent and negotiate for the interests of the entire community on all dealings with the oil industry or dealings concerning oil development in the region. At that time, the leadership of Kuukpik Corporation and the other village entities recognized that presenting a united front to the oil industry and state and federal agencies was more important than splitting the workload and power between three separate entities, two of which (the City and NVN) were neither well-funded nor constituted to operate businesses. Therefore, in 1995, the three entities entered into a tri-partite agreement[40]. The agreement contains a series of resolutions that would form the foundation for the community's acceptance of oil development in their homelands:

Kuukpik Corporation head office in Nuiqsut

That ***"the prudent use of the land and water resources and the protection of fish and wildlife in the region are to be ensured for in any potential oil and gas development."***

That the 1979 Cultural plan, Nuiqsut Paisanich, would be ***"adopted in whole and is representative of the common goal(s) of local control and self-determination, the protection of the land and water resources, mitigation of negative impact(s) which would occur as a result of oil and gas development, and the maximization of economic benefits and employment opportunities for the Kuukpikmiut today and into the future."***

That a ***"full Environmental Impact Statement process would be implemented to address the full range of issues associated with oil and gas development."***

That the ***"articulated position(s) of Kuukpik Corporation with ARCO Alaska, Inc. and Arctic Slope Regional Corporation regarding the exploration, development and production of oil and gas resources from lands on the Colville River and NPR-A, reflect the goals stated (in the agreement) and are representative of the shared and common interests of all the parties, and therefore have the full declatory support of the signators of (the resolution) on behalf of their respective organizations."*** (the three village entities).

There seems little doubt that Kuukpik Corporation has in its dealings with the oil industry and other stakeholders strived to further the interests of the community as a whole.

[40] A joint resolution of Kuukpik Corporation, the City of Nuiqsut and the Native Village of Nuiqsut, establishing cooperative agreement regarding oil and gas development. Passed in joint session in Nuiqsut, June 26, 1995.

While some the corporation's business programs, such as the shareholder dividend program, only benefit Kuukpik shareholders directly, it must also be remembered that many non-shareholders whose spouse or parents are shareholders also benefit from the dividend program indirectly.

Most of Kuukpik Corporation's activities have pursued benefits for the entire community, for example:

- *Subsistence protection and environmental conservation*

In its dealings with the oil industry, Kuukpik Corporation has continually pursued measures which protect the wildlife and the environment and mitigate potential impact from industrial activity on the tundra. Examples include the design of the Alpine-Kuparuk pipeline to accommodate caribou migration, limitations on helicopter flights during critical subsistence hunting periods, air quality monitoring at Alpine CD-1 and in the village and a wide variety of scientific studies and monitoring programs targeting key subsistence wildlife, fish and wildfowl, as well as socio-cultural issues (such as this study).

One of the most recent examples of the corporation's role in steering industrial development to match local needs is the location of a bridge across the Nechelik Channel, to carry a new service road linking the existing Alpine CD-1, CD-2 and CD-4 drill sites to the new CD-5 drill site, and further on towards new drill sites in NPR-A.

ConocoPhillips had applied for a permit for this road and bridge, based on a location for the river crossing that was initially supported by the US Army Corps of Engineers, The Alaska Department of Fish & Game, and the North Slope Borough Planning Department. The hunters from Nuiqsut were opposed to this location, because of its proximity to sites where they regularly fish for Arctic Cisco, - an important subsistence resource for the Iñupiat. Similarly, the hunters felt that the proposed bridge site was also too close to the place where the caribou herds cross the river during their annual migration.

With few exceptions, the citizens of Nuiqsut supported the idea of a bridge and service road, because it would also give the village road access to both Alpine and their hunting grounds, but they preferred another location, which would in their opinion have much less potential impact on the fish and wildlife and their subsistence activities.

In a close dialogue with local hunters, village elders and the community, Kuukpik Corporation management and leaders campaigned for their preferred location and after several years of public meetings and consultation with various permitting agencies, ConocoPhillips was able to modify their plan and relocate the bridge and roads to satisfy the wishes of the community.

The Alpine - CD-5 road and bridges were built during the 2014-2015 season and a spur road connecting the village of Nuiqsut to the Alpine road system was opened in the summer of 2015.

One of the four new bridges over the Nechelik Channel (2015)

Hunters Eli Nukapigak and Sam Kunaknana at a KSOP meeting

KSOP observers can combine their hunting and observation duties

The Kuukpikmiut Subsistence Oversight Panel (KSOP)

Kuukpik Corporation was instrumental in negotiating with ConocoPhillips for the funding and operation of KSOP, with local hunters paid to monitor the tundra and waterways of the Colville Delta and to report any impact from industrial activity such as spills, garbage, damage to infrastructure and wildlife disturbance. KSOP staff perform these duties as part of their daily subsistence presence on the tundra, as well as undertaking regular patrols by motor vehicle or snow machine, especially during the winter ice-road season when transport and construction activity is at its peak.

Though originally conceived by Kuukpik Corporation, KSOP operates independently of both Kuukpik and the oil industry and the organization includes representatives from all village entities. KSOP has no regulatory power but acts as “the eyes and ears of the community”. The existence of KSOP has made a vital contribution in establishing and maintaining confidence regarding oil development amongst the citizens of Nuiqsut.

Employment and training

Kuukpik Corporation strives to create employment and training opportunities for all Nuiqsut residents. Such opportunities exist both within Kuukpik Corporation and its subsidiaries.

Agreements with ConocoPhillips give North Slope residents, and in particular Kuukpik Corporation shareholders and Nuiqsut residents, preference for employment and training opportunities.

Education

Kuukpik Corporation has committed itself to a standing offer to give grant support to any young person from Nuiqsut who wishes to pursue an education or vocational training outside the village. ConocoPhillips shares the cost of such grants.

- *Health and welfare*

Kuukpik Corporation gives financial support to individuals and families covering medical expenses and traveling costs in relation to medical treatment outside the village. The corporation also offers financial support to families to cover funeral expenses.

- *Natural gas*

Kuukpik Corporation was instrumental in negotiating a deal with ConocoPhillips whereby Nuiqsut now receives free natural gas from Alpine – gas which would otherwise be re-injected into the oil reservoir.

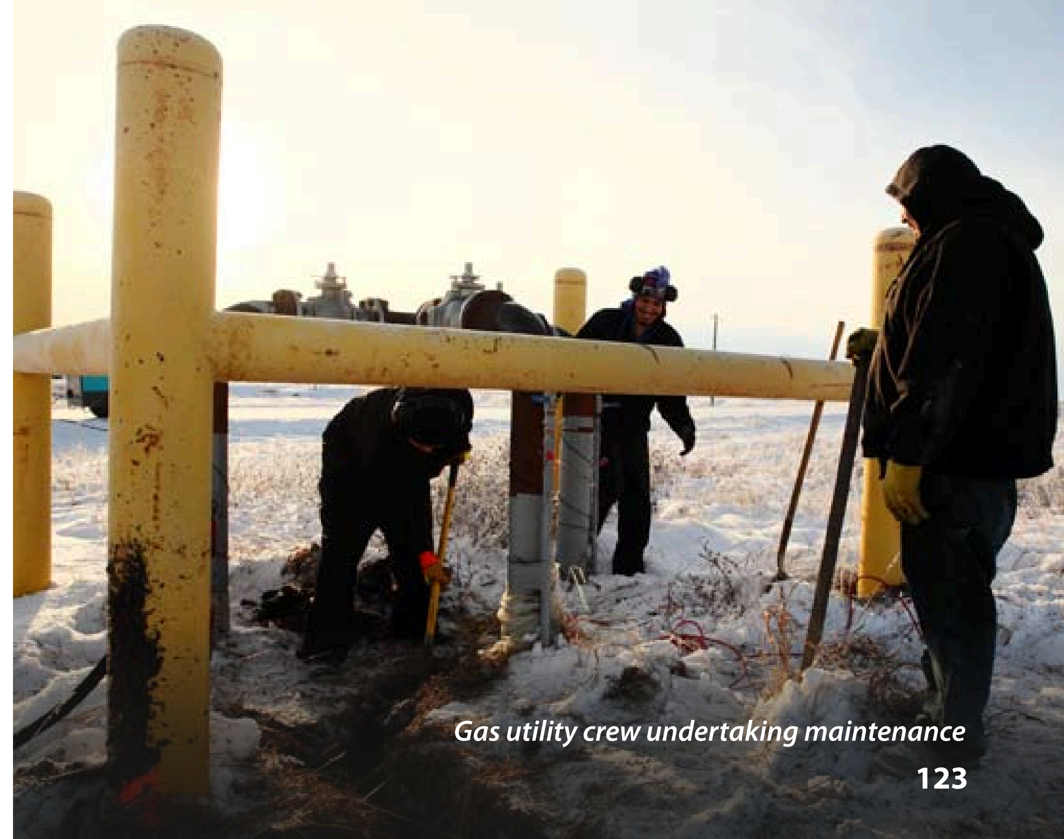
With State and Federal oil revenue impact reserves, The North Slope Borough funded the construction of a gas pipeline from Alpine to Nuiqsut and the construction of a processing plant and gas pipelines in the village. Unlike the other public utilities in the village, which are operated by the North Slope Borough, the natural gas system is operated by an independent local utility cooperative which has been successful in creating lasting employment for local people. With the exception of a non-Native manager, the natural gas utility operation and maintenance in the village is crewed entirely by local Iñupiat employees.

Nuiqsut residents pay a flat-rate of 25 dollars per month[41] for natural gas to heat their homes, a substantial saving on the cost of domestic heating compared to previous times when the citizens relied on oil or electricity for domestic heating. Natural gas is also used to power the village electricity power generation plant, with similar economic savings for the community.

There are currently proposals for the village utility cooperative to take over responsibility for power generation. Almost all buildings and homes in Nuiqsut have been supplied with natural gas since its introduction in 2008.

[41] 2013 price for natural gas.

Gas utiliity manager Don Ehler inspects the village gas station



Gas utility crew undertaking maintenance

Modern subsistence hunting means traveling further and faster with the aid of motorized transport

- *Mitigation funds*

When negotiating land use agreements with the oil industry, Kuukpik Corporation has secured tangible mitigation funds to assist local hunters financially with the increased cost of transport for subsistence activities that may arise from increased industrial activity in the Colville Delta. There are separate mitigation funds established by each oil company active in the area. The largest mitigation fund is financed by ConocoPhillips. Since 2000 ConocoPhillips has contributed a total of $600,000 in subsistence mitigation funds to Nuiqsut.

To begin with, contributions of $50,000 per year for ten years were made to a fund administered by the North Slope Borough for subsistence users in Nuiqsut.

This money was used for fuel vouchers and distributed to households on an annual basis. More recently, under an agreement with Kuukpik Corporation, this fund continues, with payments now made to the City of Nuiqsut and administered by a committee that includes representation from NVN and Kuukpik.

Payments include $50,000 for each satellite drill site constructed in NPRA and $50,000 for the Nigliq (CD-5) bridges. The first payment of $100,000 was made in January 2014 when the construction of CD-5 commenced. These payments will be made annually for the life of the satellites and will increase to $150,000 with the construction of GMT-1.

The Kuukpik Fuel Depot near to the village airport

- *Fuel subsidy*

It is perhaps ironic, that despite the oil wealth of the North Slope, the price of gasoline, diesel and fuel-oil for heating is higher in the North Slope villages than almost anywhere in Alaska. This is due to the cost of transport, which for Nuiqsut can be by air, or via the ice-road from Kuparuk in the winter.

Since the resettlement of the village in 1973, the cost of fuel has remained one of the major household expenses in Nuiqsut.

One of the first businesses established by Kuukpik Corporation in the seventies was the Kuukpik Fuel Depot, which remains the only commercial provider of gasoline and fuel-oil in the village.

According to our information from Kuukpik Corporation, the fuel business has always operated at a loss, because early on. Kuukpik decided to subsidize the cost of fuel to the villagers. The fuel subsidy is applied across the board, without any preference for Kuukpik shareholders.

Even with this continued subsidy, the cost of fuel in Nuiqsut (gasoline approx $5.00 per gallon in 2015) is high compared with prices in Alaska's urban areas.

The Nuiqsut village store

- *Village store*

Since the tent city of 1973, Kuukpik Corporation has owned the village general store. In the early days there were attempts by local residents to establish other stores selling household provisions, though most of these operated from private homes. While some private trading continues to this day, it is of a small scale and the village general store remains the primary source of commercial foodstuffs and household supplies in Nuiqsut.

Like the fuel depot business, the general store has always required some degree of subsidy from the corporation for it to operate. Factors such as the cost of transport, the small population size and the difficulties related to maintaining stocks and minimizing waste make the operation of a general store difficult compared to similar commercial operations in larger urban communities. Food produce and household items cost generally two to three times the price of equivalent items in Anchorage. [42]

For the past 20 years, Kuukpik has contracted the operation of the general store out to the Alaska Commercial Company, which operates "AC Stores" in many rural Alaskan communities. In 2006, Kuukpik funded the construction of a new and larger general store, which shares the same building as the new Kuukpik Corporation office in Nuiqsut .[43] To ensure the continued operation of the general store, Kuukpik Corporation continues to subsidize the rent of the store to the AC Company.

[42] A simple illustration of the high food cost in Alaskan villages is milk, the price of which, at around 4.70 pr. quart, is about 17 times the price of crude oil – this equates to milk selling at almost $800 per barrel – compared to West Texas Crude at 45.32/bbl (August 2015)

[43] The General Store and Kuukpik Corporation office is building No. 3315 on the village map above.

Economic performance

Kuukpik Corporation generates revenue through its royalty income from the surface use agreement with the oil industry, and from the profits of its many joint-ventures, most of which are active in the oil industry in Alaska.

Since 1988, Kuukpik Corporation has paid over $40 million in dividends to its shareholders, while increasing the shareholder equity within the corporation to over $88 million. For many years, Kuukpik Corporation has divided its profits in three roughly equal portions – one third to be re-invested in Kuukpik Corporation businesses, one-third to be distributed quarterly as dividends to shareholders, and one-third is invested in a permanent fund to be used for initiatives that benefit the entire community. In 2010 alone, the corporation allocated over $100,000 to community initiatives.

The most recent figures available to us illustrate the strong financial performance of Kuukpik Corporation:

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Net income US dollars	12,500,000	11,800,000	13,800,000	13,000,000	23,136,608
Shareholder dividend per share	201	193	210	n/a	n/a

Kuukpik Corporation financial results 2010-2012 (for financial years ending June 30th) .[44]
Net income for 2013 estimated, dividend per share for 2013 & 2014 unknown [45]

The dramatic fall in oil prices in 2014 will likely impact the financial result for 2015.

[44] Source: Kuukpik Corporation newsletter, Page 5, Volume 1, Issue 1, Spring 2013

[45] Source: Kuukpik Corporation Annual Meeting brief to shareholders 2015, by CEO Lanston Chinn & President Isaac Nukapigak

NUIQSUT VOICES

BERNICE KAIGELAK
Original 1973 settler
Hunter
Board member, Kuukpik Corporation

"You're connected to the land and you can just block everything out and it's peaceful - just peaceful. The land, it's important to me. It's where I'm from. My ancestors were here. And I hope that my children, my grandchildren and my great-grandchildren will continue to subsist and live here.

I used to be so against the oil industry because I knew it would affect our land – and the more I got to know them it became clear to me that if I wanted to protect my land, I needed to be in the picture with them."

For most Nuiqsut residents, the land remains the greatest provider of food

The land of the Colville River Delta are the most vital and most enduring asset of Kuukpik Corporation. The land represents both the corporation's cultural heritage and its economic and business foundation for the future.

Kuukpik lands comprise the land entitlement awarded under ANCSA and its subsequent amendments, a total of 115,200 acres from a withdrawal area of 571,315 acres set aside for selection by Kuukpik Corporation. While the corporation could not select and acquire title to more than the 115,200 acres allocated to it under ANCSA (plus reallocations of 30,933.81 acres from ASRC), Kuukpik Corporation has achieved the recognition of state agencies and the oil industry of its traditional use and occupancy of the entire lands within the Kuukpik withdrawal area. This also includes 46,400 acres within NPR-A, owned by Kuukpik Corporation. Most of the remaining land in the Colville River Delta is owned by the State of Alaska. Most of the land in NPR-A is owned by the federal government and administered by the Bureau of Land Management.

This de facto sovereignty of the Kuukpikmiut is perhaps the greatest achievement of Kuukpik Corporation and its leadership. Where in other parts of the United States, indigenous peoples have lost most of their lands, the Kuukpikmiut have been successful in maintaining ownership and/or recognition of their traditional land use. Such recognition also implies that Kuukpik Corporation also receives a royalty from ASRC for oil revenue from lands contiguous to Kuukpik Corporation titled land, where ASRC holds both the surface and sub-surface rights. This relates particularly to land in NPR-A where oil exploration is in progress.

For Kuukpik Corporation, the land base is a finite resource. Given the complexity of land ownership in the region, it is unlikely that the corporation will increase its land base significantly in the future. Almost all the land set aside under ANCSA for selection by Kuukpik Corporation has been selected, and most of this has been conveyed and/or patented to Kuukpik Corporation.

About 90% of the lands currently (2015) under development by ConocoPhillips in the GMT1 project in NPR-A are owned by Kuukpik (surface rights) and ASRC (sub-surface rights).

Entitlement	Entitlement (acres)	Interim conveyed (acres)	Patented (acres)	Remaining entitlement (acres)	Remaining selected (acres)
ANCSA 12(a)	115,200	43,610	69,880	1,710	3,822
ANCSA 12(b)	30,394	23,359	7,240	335	8,899

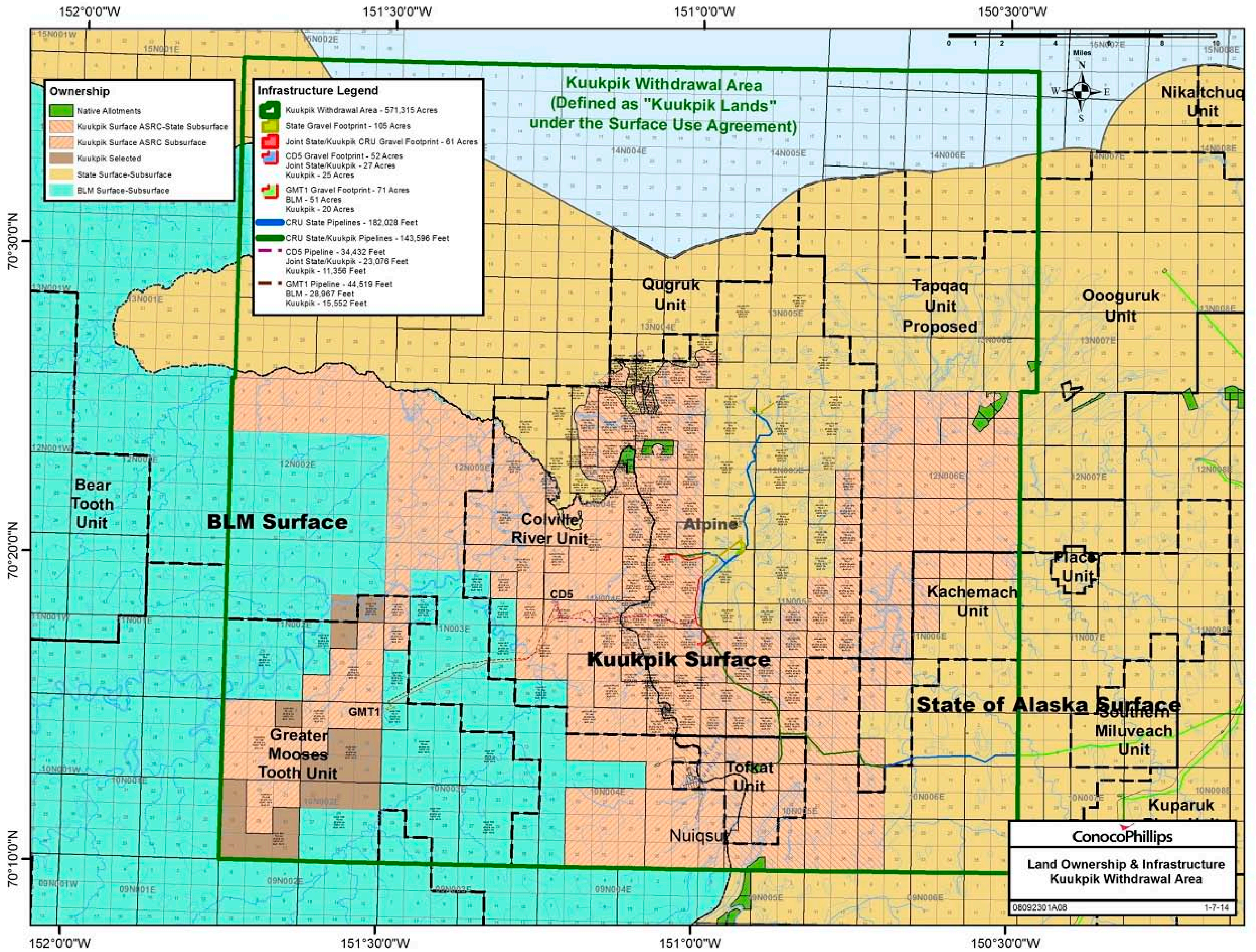
Status of Kuukpik Corporation land entitlement
Lands selection entitlements based on - 43 USC §1611 (ANCSA §12(a) and 12(b)
Source: NPR-A Integrated Activity Plan / Environmental Impact Statement Volume 1, page 337 table 3-22
Published by U.S. Department of the Interior, Bureau of Land Management, Anchorage, Alaska, March 2012

However, there will come a time when oil development progresses onto lands in the west, in areas of NPR-A where Kuukpik Corporation has no surface ownership or negotiated claims. In such an event, the corporation will not receive royalty income from oil produced on these lands, and dividend revenue will depend on the gradually declining production from Alpine and the existing Kuukpik lands. The foresight with which Kuukpik Corporation has maintained its claim to the lands of the Colville River region has ensured a revenue flow that will continue for some years.

Besides being an important economic resource, Kuukpik Corporation's custodianship of the land is a vital political tool.

While Kuukpik Corporation, as a commercial business entity, must pursue the goal of any joint-stock company; the maximization of profit for its shareholders, it is the corporation's custodianship of the land and the dual and complementary roles of combining balanced business development with a land management strategy that ensures the protection of the land and wildlife and the continuation of the subsistence lifestyle and the traditional Kuukpikmiut culture that differentiates Kuukpik Corporation from other corporate entities.

Facing page - map showing Kuukpik Corporation land ownership



Kuukpik Withdrawal Area
(Defined as "Kuukpik Lands"
under the Surface Use Agreement)
Ownership
Native Allotments
Kuukpik Surface ASRC-State Subsurface
Kuukpik Surface ASRC Subsurface
Kuukpik Selected
State Surface-Subsurface
BLM Surface-Subsurface
Infrastructure Legend
Kuukpik Withdrawal Area - 571,315 Acres
State Gravel Footprint - 105 Acres
Joint State/Kuukpik CRU Gravel Footprint - 61 Acres
CD5 Gravel Footprint - 52 Acres
Joint State/Kuukpik - 27 Acres
Kuukpik - 25 Acres
GMT1 Gravel Footprint - 71 Acres
BLM - 51 Acres
Kuukpik - 20 Acres
CRU State Pipelines - 182,028 Feet
CRU State/Kuukpik Pipelines - 143,596 Feet
CD5 Pipeline - 34,432 Feet
Joint State/Kuukpik - 23,076 Feet
Kuukpik - 11,356 Feet
GMT1 Pipeline - 44,519 Feet
BLM - 28,967 Feet
Kuukpik - 15,552 Feet
Nikaitchuq Unit
Qugruk Unit
Tapqaq Unit Proposed
Oooguruk Unit
Bear Tooth Unit
BLM Surface
Colville River Unit
Alpine
CD5
Kachemach Unit
Placer Unit
Kuukpik Surface
State of Alaska Surface
Southern Miluveach Unit
GMT1
Greater Mooses Tooth Unit
Tofkat Unit
Nuiqsut
Kuparuk
ConocoPhillips
Land Ownership & Infrastructure
Kuukpik Withdrawal Area
08092301A08
1-7-14
152°0'0"W
151°30'0"W
151°0'0"W
150°30'0"W
70°30'0"N
70°20'0"N
70°10'0"N
Miles

Other entities

Besides the three aforementioned village entities, both the North Slope Borough and ASRC also have interests in Nuiqsut.

The North Slope Borough is responsible for the school, the health clinic, power generation and water and sewer utilities - through which the borough is also a key employer in Nuiqsut.

Nuiqsut residents are represented on the North Slope Borough and the NSB Planning Commission[46] , and Nuiqsut ASRC shareholders also elect a village representative to the board of management of ASRC.

[46] Nuiqsut residents elect one member to the North Slope Borough Planning Commission and share a seat on the North Slope Borough Assembly with the villages of Kaktovik and Anaktuvuk Pass

There are also two religious congregations in Nuiqsut; The Assembly of God and the Presbyterian Church, each with its house of worship. Both churches operate without a permanent pastor, relying on local lay preachers and visiting pastors for their spiritual leadership. While most regular church services are poorly attended, religion plays an important role in the community. Almost all official meetings, public meetings and community events begin with an invocation by an elder or lay preacher.

Christianity and the spirit of thanksgiving plays an important part in many village events, particularly those related to the subsistence culture.

The Assembly of God church

The Presbyterian church

Successful hunts, particularly the annual whaling each fall, are also marked by prayers of thanksgiving for a successful harvest and the safe return of the hunters.

Subsistence whaling involves the entire community, in preparing for the whaling, in the hunt itself, in the butchering and processing of the meat, and in the distribution of the harvest to the community at Thanksgiving in November, at Christmas, and at the annual Nalukataq festival in June where each successful whaling captain and crew celebrate the end of each year's whaling season. At each of these festivals, invocations and prayers of thanksgiving by the assembled community play figure prominently.

The Nuiqsut Whalers' Association is the entity that represents the interests of the whaling crews of Nuiqsut. Along with the whalers' associations form the other six North Slope whaling communities, the Nuiqsut Whalers' Association has a representative on the Alaska Eskimo Whaling Commission.

The AWEC represents Alaska's Eskimo whaling communities at each year's convention of the International Whaling Commission, which regulates subsistence whaling and secures the Iñupiat their aboriginal subsistence whaling quota.

The AWEC and its member village whaler's associations allocate the Alaska subsistence whaling quota amongst the villages and regulate the hunt and the methods by which subsistence whaling is carried out. Since the resettlement, Nuiqsut has maintained a number of whaling crews, though only in the fall season when whaling is possible from Cross Island, off the coast of Prudhoe Bay in the Beaufort Sea.

The costs of Nuiqsut's whaling activities are borne mostly by the individual whaling captains, supplemented by financial support from, amongst others, Kuukpik Corporation, industry and the North Slope Borough.

The prayer of thanksgiving at the Nalukataq feast is usually given by one of the village elders

In comparison to other Alaskan rural communities outside the North Slope, Nuiqsut is today well-served in terms of public services and infrastructure. For the first few decades of its existence as a permanent community, Nuiqsut was heavily dependent on financial support from the North Slope Borough and ASRC, though in recent years, since the development of Alpine, Nuiqsut has been able to develop the village infrastructure from its own revenues as well.

Today, the various public services and infrastructure of Nuiqsut are maintained primarily by a combination of borough and local funding, and the level of service is generally on a par with, or better than, that enjoyed by residents in the other North Slope villages.

While a detailed study of each public service and infrastructure element has been outside the scope and resources of this project, we are able to present the following overview, based on our own observations, the testimony of many individuals in the community and some data that is available in the public domain.

The Nuiqsut Trapper School is the public school for the community of Nuiqsut, providing kindergarten to grade 12 education for all children and young people in Nuiqsut. Like other North Slope communities, Nuiqsut enjoys a village school that has modern, well equipped buildings with excellent educational facilities. The school is funded and managed by the North Slope Borough School District, which manages ten schools in eight communities, and like all schools in the district, Nuiqsut is largely dependent on non-Iñupiat teaching staff. Teachers are hired by the school district each year, typically at teacher recruitment fairs held in the lower-48 states. In Nuiqsut, the typical tenure for a school principal is 4-6 years, and for teachers 1-3 years.

This reliance on non-Iñupiat teachers combined with the high turnover rate of teaching staff creates many challenges in terms of

Nuiqsut Trapper School seen from Pausanna Street

Students working on a science project at the Trapper School - 2013

the continuity of teaching and the relationship between teachers and the students and their parents.

The school is one institution in the village where the challenges of a subsistence culture meeting the modern American society are most evident. It is also one of the institutions in which, because of the fragile and transient nature of the relationship between teachers and the local community, it is most difficult to discuss the various issues involved.

Most teachers with whom we met, including the School Principal, are acutely aware of the sensitive nature of their position in the community and most were obviously reluctant to speak freely. Those who were most vocal and open in their discussions with us, were those who had already decided to leave the village, and thus felt more able to speak openly. It must also be said, that these teachers were, at the time of our discussions, also those most disenchanted with their experience in the village, a fact which also must be taken into account when evaluating their testimony.

Several teachers told us that it is difficult to teach young people who often do not come to school, or who regularly come late or leave early. Similarly, several teachers spoke of the difficulty in teaching students who are often asleep during class periods or who do not seem motivated to learn. One teacher expressed concern that some students have alcohol or substance abuse problems which affect their school attendance and learning ability.

The greatest frustration expressed by some teachers was that it was difficult for the school to discuss such issues with the parents, and that they avoided doing so as it could be detrimental to their continued employment in Nuiqsut.

Such problems could be symptomatic of the attitude of the community towards education. These problems could also underline the difficulty of maintaining a school system that is dependent on non-Iñupiat teachers, many of whom may have limited experience and may not remain in Nuiqsut for more than a single school year, thus never developing a close working relationship with the community.

It must be said that many villagers told us about some teachers who had served in the village for a number of years and who were well-liked by students and the parents alike, who had won the trust of the community and had made a valuable and lasting impression on their students. The challenge, it would seem, is not one of attracting good teachers, its is one of keeping them for the number of years necessary for them to establish their position in the village and to achieve long-term social and educational results with their students.

Although we were not given access to any statistical data pertaining to school attendance or similar issues in Nuiqsut, we can refer to data published by the North Slope Borough School District, which does support the view that the school system on the North Slope

does face certain challenges with regard to student attendance and motivation.

> In Alaska, as in the nation, the outcomes for students who graduate from high school are more positive than for those who drop out. The NSBSD drop out rate has increased and the graduation rate decreased. We owe it to our students to provide them the opportunities that a high school diploma provides.
>
> The NSBSD four year graduation rate in 2013 was 70% and in 2014 was 49%; the five year rate in 2013 was 62% and in 2014, 72%. The NSBSD drop out rate in 2013 was 6.7% and in 2014 was 8.8%. The drop out rate is the percent of students in grades 7 through 12 who left our school system without transferring to another school. The graduation rate is the percent of students from the cohort of students who entered in 9th grade who graduated four or five years later.[1]
>
> [1] NSBSD Superintendent's memorandum to NSBSD Principals "Drop-out prevention and graduation promotion project" August 5 2014

Students giving an online presentation - 2013

In a 2014 memorandum to NSBSD school principals, the NSBSD Superintendent, Peggy Cowan, wrote:

In its Overall Health Assessment[47], the North Slope Borough

> Because of the small size of the NSB School District, graduation rates fluctuate substantially from year to year. Between 2005 and 2009, however, the average graduation rate in the NSB School District was lower than that for Alaska overall and the U.S., but slightly higher than that of Alaska Natives statewide. A student in Alaska does not count as a graduate if the student has not passed the HSGQE, regardless of earning required credits for graduation. Also, the graduation rate does not always correctly reflect students who leave school and come back to graduate at a later time.

Average National High School Graduation rates, 2005-2009			
NSB School District	Alaska (all districts	Alaska Native (all districts)	U.S. public schools *
54%	63%	49%	70%

* U.S. rates are for 2005-2007
NSB and Alaska Data source: State of Alaska Department of Education and Early Development
US Data source: Graduation Rate Trends 1997-2007. Education Week June 14 2010 Vol 29 Issue 34

> Within the NSB, Kaktovik had the highest average high school graduation rate (90%), and Nuiqsut had the lowest (30%) during the most recent seven-year period. Caution must be used when interpreting these numbers, due to the small numbers of graduates per year.

The same NSB assessment[48] addressed the question of Grade 7-12 School Drop-Out Rates:

[47] North Slope Borough Overall Health Assessment 2010, Chapter 1, page 85

[48] North Slope Borough Overall Health Assessment 2010, Chapter 1, page 86

School drop-out rates are an imperfect measure of school engagement and achievement, especially in small districts, but they do allow some examination of trends over time. The five-year average school drop-out rates in the NSB increased from approximately 5% through most of the 1990's to almost 8% between 2000 and 2008. The most common reasons NSB household heads cited for students they knew leaving school before graduating were; boredom with school, having a baby, being behind in credits, and "other reasons".

Though the high drop-out rate and low graduation rate may be cause for concern, the Nuiqsut Trapper School continues to perform a vital role in the community. In the curriculum subjects which offer the teachers the opportunity of giving the subject a local relevance, the engagement and motivation of the students is visibly higher than in subjects which for the students have less apparent relevance to their lives and aspirations in Nuiqsut.

During our visits, we witnessed a school project in which Nuiqsut students made an on-line presentation via YouTube to students in other U.S. schools. They presented their lives and their Iñupiat culture, and showed the fall whaling and various hunting activities.

Students giving an online presentation - 2013

It was a project that won the approval of their peers in other schools and gave the Nuiqsut students some degree of success in their own school.

As in all cultures, the degree of parental engagement and involvement in their children's education varies widely between different families. We met many adults who placed a high value on their children's schooling and were active and supportive in helping them with their schoolwork. Many elders and hunters, who may not have enjoyed the same educational opportunities of today's younger generation, have dedicated a lot of their time to assisting in the classroom, teaching traditional Iñupiat sewing, craftsmanship and art, or imparting their traditional knowledge of the land and the wildlife as part of the schools natural science studies.

The challenges that the school in Nuiqsut face today mirror in many ways those of the other North Slope communities. Since it's inception, the North Slope Borough has invested huge sums in the North Slope Borough School District. Because of the isolation of the villages and the previously poor school buildings, it was natural that the North Slope politicians first priority was in capital investment, bringing modern, well-equipped schools to the North Slope villages. It was also an investment program which the leaders understood, because most of the development of the public infrastructure in the eighties and nineties focused heavily on buildings and technical infrastructure. It was an economic boom period in which the villages rightly demanded tangible physical evidence of the modernization of their communities.

With the advent of the North Slope home rule government and the construction of modern schools in every village came the immediate need for human resources, particularly educators. Looking back, an outsider could wonder why the Iñupiat did not use their new found oil wealth to develop a school system that more closely matched the educational needs and abilities of the Iñupiat culture – particularly with regard to language. But such a question ignores several salient factors.

Firstly, in the early eighties, there were few, if any, qualified Iñupiat teachers, and at the time, no established Iñupiat education system that could meet state and federal requirements.

Secondly, the North Slope Borough, though rich in oil wealth and empowered by the home rule concept that grew up with the borough government, was not free to pursue a program of public education that essentially differed from the already establish educational standards as defined under state and federal law. The new North Slope Borough school district could establish new schools, but in running them, it had to adhere to the curricula-minima that apply throughout the United States, and to prepare its students for evaluation according to standard aptitude tests used across the nation.

Thirdly, amongst the adult Iñupiat population, whose political support formed the foundation for borough educational policy, there existed the universal parental ambition of giving their children a better chance than they themselves had enjoyed. They had grown up as Iñupiat, with English as a second-language and had seen generations of outsiders come to their communities and to the oil fields of Prudhoe Bay, and reap the economic benefits of permanent skilled employment while many of their people had to make do with seasonal construction work. The Iñupiat leaders could see, that they were in the process of forming regional and village business corporations and building the public sector on which their future welfare would depend. It was natural therefore that the leaders looked to the American school system as the route which their children must follow, if they too should achieve a working economic stake in the future and gain the business and political skills necessary to govern their own lives.

Therefore the choice of embracing the US school system, its curriculum and its non-Iñupiat teachers was the logical one in the early eighties. But that choice left the North Slope villages with the continuing paradox of a village school that by necessity is based on values and ideas that in differ greatly with those of the Iñupiat culture.

ANCSA and the new oil wealth was not the only driving force to provide schools in every Alaskan village. Since the "Molly Hootch" court case[49] in 1971, that declared the provision of boarding schools for Native children discriminatory, the State of Alaska had been obliged to fund the construction of schools in all villages in which the community demanded their own school. This gave rural communities some degree of influence in the running of their school, though the curriculum and teaching methods were primarily governed by Alaska state laws and regulations, which themselves were based on the school system and cultural values of white urban America.

Each generation of children that has grown up in this system has had to learn to live in two worlds, often with the consequence that their ability to navigate in one sometimes suffers at the expense of the other. The Iñupiaq language being a particularly obvious example.

After 40 years, the number of qualified Iñupiat teachers remains disappointingly small, yet surely this must be a goal for the Iñupiat people? To be able, one day, to educate their *own* children in their *own* language, with teachings based on the cultural and practical needs of their *own* society – not at the expense of the conventional American curriculum necessary to give students a path to higher education and skilled employment, but as a solid foundation in their own culture and traditions on which to build a life in two worlds? To enable them to become good Iñupiat role models for the next generation?

Such ideas reflect the dreams of some Iñupiat leaders, to enable their own young people to gain education and skills that they can bring back to their community or to the industrial workplaces that have come to their lands. It is an ambition which ConocoPhillips has also embraced at Alpine, as the Career Quest program with the Nuiqsut Trapper School boldly tries to create new opportunities for the young people of Nuiqsut.

[49] See the Alaskool website - http://www.alaskool.org/native_ed/law/mhootch_erq.html for ***ALASKA'S "MOLLY HOOTCH CASE" : HIGH SCHOOLS AND THE VILLAGE VOICE*** by Stephen E. Cotton, Attorney, Andover, Massachusetts

Looking back - school students in tent city 1973

Looking forward - a modern school for Nuiqsut - seen here in 2013

Health & Medical Services

The North Slope Borough and the Arctic Slope Native Association share responsibility for providing health-care services to the residents of the North Slope Borough. With the exception of Barrow, few if any of the North Slope villages have a doctor working and living permanently in the community. In Nuiqsut, the village Health Clinic, Uyaġagvik, is the front line health care provider for the community, staffed by two community health aides who must handle a wide variety of routine health care and emergency medical cases. The NSB health aides are non-medical personnel, typically from the communities in which they work, who are trained in the provision of basic health services according to protocols and under the supervision of medical providers in Barrow. Serious emergencies or more complicated planned treatments are sent to Barrow or other towns where fully staffed hospitals can provide treatment.

During our research visits, the health care aides at the Nuiqsut clinic were both Iñupiat, with a close understanding of the community. This is of particular value when providing routine care to elders, many of whom do not speak English as a well as they speak Iñupiaq.

On all issues that require the expertise of a doctor, the clinic staff in Nuiqsut can confer with doctors and other specialists in Barrow via telephone or a telemedicine video link. The clinic is well equipped and hosts regular visits by other specialists such as dentists, who are able to offer treatment locally, though only periodically.

With no doctor or surgeon in the village citizens must fly to Barrow, Anchorage or Fairbanks for medical care and emergency treatment

On an everyday basis the health aides handle all routine health care such as family planning, minor injuries, routine sicknesses and infections, medication as well a ante- and post natal care and drug detox care.

A study of the health of the community is beyond the scope of this report. We recommend readers who require detailed health statistics and a comprehensive overview to refer to the North Slope Borough 2012 report[50], which highlights several borough-wide social and health issues that merit attention, not least being that the five most common causes of mortality (cancer, heart disease, unintentional injury, chronic lower respiratory diseases and suicide) in the borough are alarmingly high compared with the population of Alaska in general.

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[50] McANINCH, Jana MD, MPH, **Iłuaġniaġnikkun Qaisakrat / Baseline Community Health Analysis Report, July 2012**, Prepared for the North Slope Borough, Department of Health and Social Services

Uyaġagvik - The village health centre - provides health care and routine medical treatment to the community

North Slope Borough Police Department station and accommodation

Public safety

The police and public safety affairs of Nuiqsut are administered by the North Slope Borough Police department which has its headquarters in Barrow.

The NSB Police Department typically has two public safety officers, typically hired out of the North Slope and even out of state, stationed in Nuiqsut who handle all local police and public safety matters in the community, though drawing on the resources of Barrow in the event of more complicated cases. Cases which require prolonged detention or appearance in court are transferred to Barrow.

While we did not study the work of the local public safety officers in detail, we did get some basic information from others in the community. According to this testimony, the public safety officers in Nuiqsut maintain a discreet profile, responding only to local incidents when called upon by the community, with the exception of obvious infractions such as drug and alcohol trafficking, for which they maintain routine inspections and searches at the airport.

In common with our discussions with the staff of the Nuiqsut Fire Department, which also operates the ambulance service in the village, it would seem that most events to which public safety officers are called involve domestic disturbances, often with alcohol or substance abuse as a contributing factor.

North Slope Borough Departrment of Municipal Services depot

Roads

Because of the climate and ground conditions, Nuiqsut's roads are unpaved gravel, and require regular maintenance and grading, together with repairs each year due to erosion and frost damage. The roads are maintained by a crew of heavy-equipment operators employed by the North Slope Borough Department of Municipal Services, based in a depot and maintenance workshop in the village. Besides maintaining the gravel road, using locally mined gravel, the crews handle snow-clearance in the winter and spray water to minimize dust from the roads in the summer. The North Slope Borough crews also handle other heavy work such as the installation of telephone and power poles, the preparation of graves for funerals, and maintenance of NSB vehicles and buildings.

DMS employees maintain the roads in the village

Nuiqsut Fire Department

The Nuiqsut Fire Department is operated under the supervision of the North Slope Borough Fire Department and is responsible for response to fires, floods and other hazardous incidents in the City of Nuiqsut. The Fire Department also operates the ambulance service, and in cooperation with the health clinic organizes medical evacuations of patients in need of treatment outside the village. Medical evacuation may be by commercial charter, or via the North Slope Borough's search as rescue department, which operates a fleet of medevac aircraft and search and rescue helicopters.

The Nuiqsut Fire Department has two permanent fire chiefs, one of whom is on duty or on call at any time. The crews - both ambulance EMT's and firefighters - are composed of volunteers, and the department is a popular workplace in the community, in which service as an EMT or firefighter carries a lot of respect. Over the years, many Nuiqsut residents serve or have served as volunteers in the Fire Department.

The fire hall is well-equipped and well-maintained, with two modern pump-tenders and an ambulance, plus special equipment such as boats, snow machines and four-wheelers to cater for most situations. The fire department also cooperates and exercises often with the volunteer search and rescue organization in the community, whose volunteer members handle emergencies or searches outside the village, typically on the tundra or the river, providing support for the local hunters in situations to which the fire department cannot respond without leaving the village unattended and unprotected.

The fire department holds regular meetings and joint training events with the Fire Department at Alpine, where some Nuiqsut residents are also employed.

Nuiqsut Fire Station

Volunteer Search & Rescue

There are many hazards related to life as a subsistence hunter. Travelling on the tundra and the rivers, particularly in the winter, can be dangerous. Besides the risk of encounters with wild animals such as bears and moose, there are the hazards of the climate and the terrain, all of which can be dangerous for even the most experienced hunter.

The village operates a volunteer search and rescue service to aid hunters in distress and to give peace of mind to their families when the hunters are away from the village. The village volunteers can request assistance from the North Slope Borough Search & Rescue department, which operates helicopters and vessels from its base in Barrow.

Public transportation

The North Slope borough operates a school bus during the school season, which transports the local children to and from school each day. There is also a small bus for the elders, which enables the elders to travel easily between their homes, the village store and other parts of the community.

Waste collection and disposal

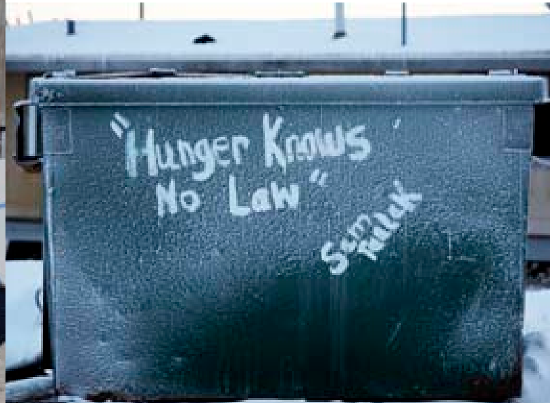
The North Slope Borough DMS facility in Nuiqsut provides refuse dumpsters at key points on each road in the city, as well as at major community buildings and workplaces. Refuse collection is handled by truck, and refuse is transported to a dump north of the village, where it is either burned or deposited. Until 2004, the refuse department also handled the regular emptying and disposal of "honey-buckets", the ubiquitous chemical toilets that previously were used in most buildings and private homes in Nuiqsut.

With the advent of a permanent water and sewer system, most honey-buckets have been decommissioned in favor of modern flush toilets. In recent years the children of the North Slope villages have decorated all the refuse dumpsters with various cultural themes - a collage of these is shown on the following pages.

Volunteer Search & Rescue Station

School bus at the Trapper School

Refuse dumpster in Nuiqsut



Cultural values expressed on garbage dumpsters in Nuiqsut

SAVE ME!

Rise Up!
Jesus Luvs The Kids

KEEP

Praise

Sharing

GOD Bless America

Reach Out To Others

Safe Trips

This Land is your Land
Keep it Clean!

DUMPSTER
Monster

SPEAK
YOUR
LANGUAGE
IÑUPIAQ

Keep Smiling
PASS IT ON

Love Your Neighbor

"For Everything
There is a
Season"

The extreme climate with high wind speeds and frozen power lines dictates regular maintenance during the short summer season.

Energy Power generation and natural gas

Power generation and distribution is managed by the North Slope Borough. The village power plant is located adjacent to the school.

Until recent years, the generators were powered by diesel oil, but since the introduction of natural gas from Alpine to heat all homes and buildings in the village, the power plant has been converted to natural gas, significantly reducing particle emissions and the cost of power generation for the community.

Though originally funded and regulated by the borough, the natural gas system is operated by a local utility cooperative. There are proposals under discussion about Nuiqsut operating its own power plant and distribution network, along lines similar to the gas utility.

Natural gas is a by-product from the Alpine oilfield. During the short shut-down of the Alpine processing facility for maintenance each summer, natural gas is not available to the village. This maintenance period is scheduled during the summer when the requirement for heat in the village is minimal. During the Alpine shutdown, power generation is the village is achieved with diesel powered generators.

Nuiqsut natural gas utility station

Water & sewer utilities

Nuiqsut was built without a water and sewer pipe network, necessitating for many years the weekly delivery of potable water to each household by a tanker truck, and the regular emptying of honey-buckets. The first building to have regular water and sewer facilities was the Trapper School. In recent years the North Slope Borough has provided water and sewer services to most buildings in the village. Freshwater is pumped over the tundra approximately 1½ miles from Freshwater Lake, south of the village and held in storage tanks at the NSB tank farm, north of the school.

Telecommunications

Prior to the establishment of the Alpine field, telecommunication facilities in Nuiqsut were somewhat limited due to the lack of infrastructure and bandwidth on the North Slope. There were few land-line telephones in the village, mostly in public buildings, and the community relied on VHF or CB radio for much of the daily communication, especially between households and hunters working away from the village. The telephone service was provided by ASTAC, (a regional telecom cooperative) though bandwidth out of the village was the limiting factor for any growth in telecom use.

With Alpine and the growth of telecommunications since 2000, the village has both the original ASTAC service and a commercial mobile network served by GCI, both of which still share limited bandwidth out of the village, though the service has improved since the establishment of links serving Alpine.

In the past decade, mobile cellular phones have become popular in the community, not only amongst the younger generation. Cellular phone coverage extends some miles outside the village, giving additional communication opportunities to hunters when on the tundra, though not yet with a range that competes with VHF radio.

With the advent of internet and especially mobile internet, the use of social media by all age groups in the village has grown. Nuiqsut residents are generally avid users of the internet and social media. This seems to be the case across the North Slope, probably because almost every Iñupiat has relatives in other villages, whom they do not often get the opportunity to visit, due to the cost of air travel. Social media have given the Iñupiat the means to maintain their kinship ties, many citizens post family pictures and pictures from subsistence activities on a daily basis. A decade ago, the primary daily informal communication between villages went via the Barrow-based North Slope AM radio station, KBRW, via daily phone-in broadcasts such as "*The Birthday Show*", which enabled residents in all villages to send greetings to each other. While KBRW continues to be popular, social media have taken the lead with regard to daily communication between the villages.

The telecom operators have also been able to provide satellite-TV to Nuiqsut and most households have subscription to satellite-TV.

Since the advent of a higher bandwidth broadband connection to the rest of the state was established for Alpine, Kuukpik Corporation was able to establish a high bandwidth connection for its offices in Nuiqsut. This bandwidth is made freely available to the rest of the community outside office hours.

Nuiqsut seen from the south with the GCI and ASTAC link stations providing telecommunications and satellite tv to the village

Nuiqsut airport (IATA:NUI, IACO:PAQT, FAA LID: AQT)

The airstrip at Nuiqsut is owned and maintained by the North Slope Borough and regulated by the Alaska Department of Transport and the FAA.

The airstrip, which lies to the south of the village, has a 100 foot wide gravel runway, 4,589 feet long, with a runway orientation of 50 degrees / 230 degrees, and an elevation of 37.5ft (12m) above mean sea level. Though maintained by local NSB staff and attended by local air carrier agents, the airstrip is classified as unmanned with no tower.

There are no commercial aircraft based in Nuiqsut, though the airport is served daily by commercial air taxi and freight carriers linking Nuiqsut with Barrow to the west and with Deadhorse and Kaktovik to the east. There are regular landings of freight carriers bringing foodstuffs and household provision to the village store and hotel. There are also occasional flights to and from Alpine.

In 2005, Nuiqsut airport had 1800 operations, approximately 150 per month, comprising 83% air taxi services, 11% military and 6% general aviation.

Thomas Napageak Jr. and Carl Brower handle the unloading of freight and baggage

Several regional commercial carriers share an agent in Nuiqsut, who arranges flight bookings, handles loading and unloading of baggage, delivers parcels and acts as the village contact for a wide variety of aviation related affairs. Aviation between the villages and regional hubs such as Barrow and Deadhorse is expensive and flights are always subject to delays or cancellations due to adverse weather conditions.

Small commercial aircraft such as this Cessna Citation V 560-L 11-seater operated by Era Aviation are the lifeline of rural Alaska

As the pilot checks the passenger list one couple say their goodbyes before boarding

Nuiqsut seen from the north with the Nechelik Channel on the left of this picture and the Colville River main channel in the background
The Kuukpik Hotel and the temporary "Fox Camp" for accomodation of winter construction workers can be seen in the foreground above

Employment

We were unable to find any centrally-coordinated database covering employment in Nuiqsut. The following summary is based on estimates received from various sources in each village entity and must be considered an estimate for 2013. Some jobs are full-time, some are part-time, some are seasonal, and the level of turnover in several workplaces is high compared to that in urban communities.

Notwithstanding these reservations, the following estimate indicates that there are jobs in the community for a total of 132 persons (85 employed full-time, 47 employed part time), which amounts to 59% of the adult population between 20 and 60 years old.

This estimate does not account fully for seasonal work, nor for persons that might hold more than one job. Neither does it account for that proportion of the working population who may be under 20 or over 60 years old, nor the contribution made to the village economy by the system of exchanging subsistence produce and domestic favours for cash or kind, a practice that to us seems quite prevalent in the community.

While the various village entities continue to explore opportunities for creating employment positions in the village, such opportunities are limited, both by the number of qualified applicants and the limited funding available for jobs additional to those already provided for in each village entity or workplace. In employment terms, Nuiqsut is a closed system, dependent on the public sector and with virtually only one corporate employer (Kuukpik Corporation) for employment opportunities.

It would therefore seem that future (additional) employment opportunities will include the following options –

- Employment at Alpine or in nearby fields – seasonal and full-time
- Employment at other North Slope locations
- Employment with new oil field service businesses based in Nuiqsut (see also next section)

In the longer term, it may be hoped that a combination of the above employment opportunities may result in bringing more revenue into the community, thus generating some additional household spending in the village, which in turn might support a few more service jobs in the community – possibly even to the extent of fostering some small private businesses owned and operated by local residents.

In preparation for this report, we asked ConocoPhillips to provide an estimate of the number of jobs for Nuiqsut residents which they expect Alpine and surrounding fields to generate in the future.

Although it is easy, on the basis of previous year's employment statistics, to predict the employment generated by the annual ice-road construction projects and some contracts at Alpine, it is difficult to be more precise with regard to the potential employment opportunities for Nuiqsut residents in the nearby oilfields as a whole.

ConocoPhillips, together with other oil companies active in the region, has given a commitment to shareholder and local resident hire, and this goal is also shared by the majority of oil field service companies, most of which, including Kuukpik Corporation, offer internships and training opportunities for any local resident who wishes to pursue a career in the oil industry.

In terms of potential, the accommodation capacity of the Alpine camp at over 650 employees (in the winter construction season) shows that the number of positions in the oil industry – today and in the near future - far exceeds the number of local residents who are both qualified and who seek full-time employment at Alpine or other oilfield workplaces.

Quite apart from the established policy of giving employment preference to qualified local residents, it is also to the advantage of the oil industry to employ qualified local labor rather than bearing the considerable cost of shipping employees to and from Anchorage.

ID	Work location	Jobs	EMPLOYEES		Comments
			Native	Non-Native	
EMPLOYMENT IN NUIQSUT 2013 ESTIMATE					
	NORTH SLOPE BOROUGH SCHOOL DISTRICT				
1	Trapper School	Office	3	1	
2	Trapper School	Teachers	0	18	
3	Trapper School	Kitchen	4	1	
4	Trapper School	Maintenance	4	1	
	NORTH SLOPE BOROUGH - OTHER				
5	Power plant	Operations	3	0	
6	Water treatment	Operations	2	1	
7	Housing	Building inspector	0	1	
8	DMS	Office	7	0	
9	DMS	Mechanics	2	0	
10	DMS	Equipment operators	3	0	
11	DMS	Management	1	0	
12	Clinic	Various	5	0	
13	Fire department	Various	3	0	
14	Police department	Police	0	2	
15	Search & Rescue	Various	0	0	(volunteers)
16	Airport	Various	2	0	
	KUKKPIK CORPORATION				
17	Office	Various	8	0	
18	Kuukpik Fuel	Various	2	0	
19	Kuukpik maint.	Various	2	0	
20	Utility	Various	3	1	
21	AFC	Various	5	15	(seasonal)
22	Hotel	Various	0	5	(additional in winter)
	KUUKPIK / ALASKA COMMERCIAL				
23	AC store	Various	2	3	
	NATIVE VILLAGE OF NUIQSUT				
24		Various	3	0	
25	KSOP	Various	2	0	(seasonal)
26	City Hall	Various	5	0	
	OTHER COMMUNITY ENTITIES				
27	Post Office	Various	2	0	
28	Teen center	Various	2	0	
	ALPINE / CONOCOPHILLIPS ALASKA				
29	Various	Various	10	0	(some seasonal)
	TOTAL		**85**	**47**	**132**

Authors' estimate of actual employment in Nuiqsut, 2013, from own observations and various oral sources. This estimate is representative of the general employment situation in Nuiqsut, though due to the generally high turnover - especially in seasonal employment - any such 'snapshot' estimate will only be accurate for a short time after it is made.

In this respect it would seem that the extent of future employment opportunities for Nuiqsut residents at Alpine and nearby oilfields is something that the community, the village entities and particularly Kuukpik Corporation have the greatest influence over, providing that there exists a desire amongst the citizens to overcome the traditional obstacles to becoming qualified and to pursuing employment opportunities.

Transport and isolation

The citizens of Nuiqsut are no longer isolated. There are daily flights from Nuiqsut Airport to Barrow to the west and Deadhorse to the east, from where there are connections to the rest of the state. At any given time, many of the villagers will be out of town; some on work or business, some visiting family in other villages, some on shopping trips to Anchorage or Fairbanks. Several residents take regular holidays out of state, typically around Christmas, following the seasonal dividend payments. During the winter ice-road season, some villagers drive from Nuiqsut to Deadhorse, and further south to Fairbanks or even Anchorage.

Every day there are many villagers whose work or subsistence activities takes them out of the village, though with modern means of transport such as motor-boats, four-wheelers and snow-machines, most hunting and gathering expeditions last little more than a few days. In appearance Nuiqsut is a typical rural Arctic community. For approximately eight months of the year, from late September or early October until late May, the ground is covered by snow, with temperatures usually well below freezing point.

Therefore the appearance of the streets and the individual housing lots is more functional than ornamental. Few homes have garages, therefore motor vehicles, snow machines, four-wheelers, boats and hunting equipment are usually to be found outdoors, along with the many non-functional machines which are kept as spare parts.

Once each year, during the summer months when the snow thaws and reveals the detritus of the previous year, the City Council organizes a village clean-up and much of the waste is taken to the refuse dump outside the village. In rural Arctic communities such as Nuiqsut, which have no road connection to the outside world, the disposal and recycling of scrap motor vehicles, machinery, household goods and durables such as vehicle tires is not an easy task.

The Iñupiat are also very resourceful in using otherwise discarded machinery and parts to maintain the equipment and vehicles that they own, therefore they are often reluctant to throw such things away, knowing that they might be needed in the future.

Many Nuiqsut households maintain several motor vehicles, boats with outboard motors, four-wheeler ATV's, and snow machines and are dependent on these for their subsistence activities. Today, subsistence hunting is almost exclusively powered by gasoline.

From an early age, the children learn to use motorized transport

Crossing the new bridge on the road to CD-5

One difference between Nuiqsut and other rural Arctic communities that is immediately obvious is the abundance of motor vehicles and other forms of motorized transport such as snow-machines, four-wheelers and motor boats. Despite the village having only a few miles of gravel road, most households have at least one motor vehicle, usually a pickup truck, as well as other machines which are used both for hunting and general transport. Many households have more than one motor vehicle. The major villages entities such as the North Slope Borough, Kuukpik Corporation and its subsidiaries Nanuq and Kuukpik AFC, also operate many motor vehicles.

The growing abundance of motor vehicles is a result of the economic growth in the community since the opening of Alpine. Dividend and employment income, as well as the various benefits such as mitigation funds, have given the villagers the opportunity to invest in better transport – both for use in the village and in connection with their subsistence activities. Similarly, the nature of Nuiqsut as a base camp for the oil field ice-road winter construction season, also brings many motor vehicles, large trucks and construction machines to the village, most of which are "moth-balled" during the summer and prepared for the next winter construction season.

With the ongoing growth in and around the Colville River Unit, particularly on the west bank of the Nechelik channel towards the new CD-5 drilling pad and further on to GMT-1 in NPR-A, Nuiqsut now has a spur road, connecting the village to the Alpine road system.

Construction of the spur road was completed in 2015. The road connection has been desired by both the oil industry and the community for many years, though the permitting process via the US Army Corps of Engineers and other agencies has been slow.

The new road connection between Nuiqsut and Alpine opens several new opportunities for the community.

Firstly, it will now be possible for Nuiqsut residents working at Alpine to drive to and from work each day, thus eliminating the necessity to live at Alpine for two weeks at a time. The changes in work patterns that this may bring, along with the increased ability of the villagers to combine regular employment with family life and subsistence activities, may prove to be the catalyst necessary to achieve greater employment at Alpine amongst Nuiqsut residents.

Secondly, the road connection will give the villagers easier access to more of their subsistence territory, enabling them to travel further in pursuit of wildlife, wildfowl and fish, and to more easily transport their harvest back to the village, without having to dedicate so much time and effort to the task. Again, this might make it easier for some villagers to combine employment and subsistence and may to some extent compensate for the impact of changing migration patterns on the subsistence harvest. There are of course concerns amongst the villagers, that the additional vehicle activity from both the oil industry and the community may disturb the wildlife.

Thirdly, the road connection opens new employment and business opportunities in the village. Not only will villagers be able to travel to Alpine and other oil industry work sites, the oil industry will also be able to establish and support business operations in the village – should the villagers decide that this is something they want.

For example, the road connection to Alpine gives Kuukpik Corporation and its subsidiaries the opportunity to establish maintenance and service businesses in the village to provide a range of services to the oil industry, drawing on local labor and allowing the oil industry to use its limited footprint on the tundra more efficiently. Such businesses would not only be able to service ConocoPhillips, but also other operators who will arrive in the region as the quest for oil gradually moves into NPR-A.

This third aspect of the new road connection is perhaps the greatest opportunity for the village. Until 2014, very few permanent jobs in other than the village entities were available in the community, without employees being required to live away from home for weeks at a time. This has obviously been one obstacle that has limited the growth of permanent employment amongst Nuiqsut residents.

Lastly, with the opening of the spur road Nuiqsut enjoys improved emergency response support from the fire department and EMT crews at Alpine - the community is no longer isolated.

Fishing on the river ice at midday in November 2013. Soon the sun will disappear for many weeks.

Like many rural Arctic communities, Nuiqsut has lived with a situation in which employment has been largely dependent on the established village entities – the "public sector" in alliance with the regional and village corporations, whose efforts to create employment are both necessary for the services which they provide as well as being a way of redistributing the oil wealth and promoting the economic welfare of the community.

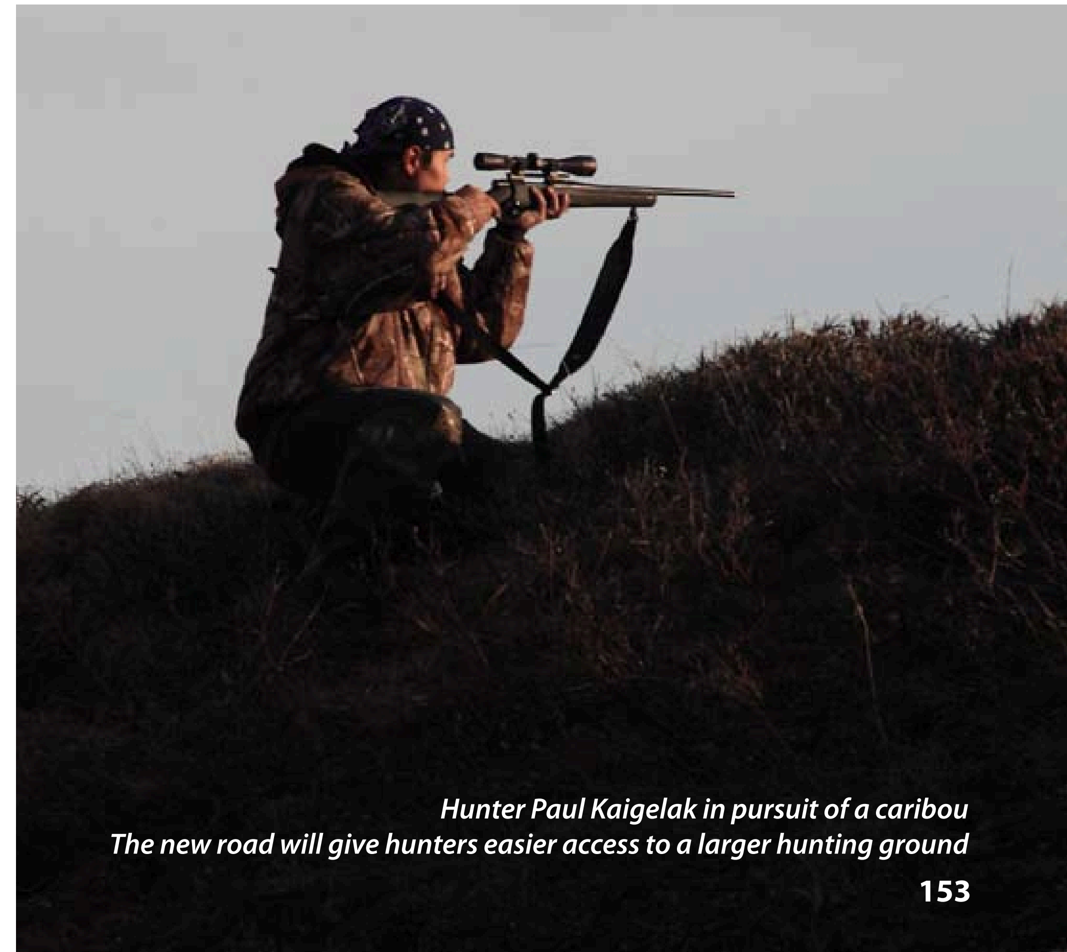
This situation has given the village entities both a responsibility, which some of them do not always consider commensurate with their core activity or one which they economically are able to bear, and a de facto monopoly over the economic development of the community. Not surprisingly, with the passing of years this situation has led to a divergence of opinion within the community as to the goals and responsibilities of the various village entities.

A road connection to Alpine and beyond will certainly reduce the isolation of the community of Nuiqsut, but it will also raise new questions and new challenges for which the community must prepare itself. If Nuiqsut becomes a "service hub" for the surrounding oilfields, it is not only the village entities that might seek to establish business operations and employment opportunities in Nuiqsut. While there is little tradition for private enterprise amongst the Iñupiat, it may soon be feasible for individuals to establish businesses independently of the village entities, just as establishing service businesses based in Nuiqsut may also be an attractive business proposition for other Alaskan industrial companies.

Such opportunities raise many questions for the community. Do the Iñupiat people wish to start their own businesses, independently of their existing entities? Do the villagers wish to see outsiders establish businesses in Nuiqsut, that may bring outside labor, and possibly their families, as residents into the community? It is our clear impression that the majority of Nuiqsut residents, regardless of their shareholder status or involvement in the various village entities, are against the idea of more outsiders becoming residents in the community.

Until now, the logistics of the oilfield and the desire of the majority in the community to retain their Iñupiat culture and demographic majority in Nuiqsut have dictated the "work camp" approach, whereby outsiders are itinerant labor, living temporarily in a camp or hotel on the outskirts of the village, where there is an established policy to avoid regular interaction with the community. Furthermore, Kuukpik Corporation's status as the principal land-owner has given the community control of who can buy, rent or build a home and become a Nuiqsut resident.

These are questions which only the villagers themselves can answer. In this respect Kuukpik Corporation has an important role in promoting a development policy which reflects the wishes of the entire community.



Hunter Paul Kaigelak in pursuit of a caribou
The new road will give hunters easier access to a larger hunting ground

Nannie and Paul Kaigelak on the tundra up river, south of Nuiqsut, hunting for caribou, Summer 2013

Overview

For Nuiqsut today , the important subsistence resources are pursued primarily for food, though some by-products such as whale baleen, sealskin, caribou antlers, walrus tusks, as well as some bones and furs are important for making clothing items or Native arts and crafts products, some of which may be sold outside the village.

Besides the bowhead whale, marine mammals such as walrus and seal are important sources of protein and edible fats. Land mammals such as caribou and moose are also sought after for their meat and skins.

Fur-bearing animals such as polar bears, grizzly bears, wolves, wolverines and foxes are hunted primarily for their skins, which provide important income for some hunters.

Wildfowl - from both the land and the ocean - are hunted for the meat. Geese and ducks in particular make up an important and sought after part of the Iñupiat diet.

Fish, mainly from the river, are netted throughout the year - both during the summer, and through the ice in the winter months. The only exception being during the spring thaw, when the heavy flow of meltwater towards the ocean brings strong currents and much sand and silt with it, reducing the number of fish that migrate upstream.

Most meats are preserved, either frozen in ice cellars and modern freezers - or dried. Some meats can be preserved in seal oil, along with vitamin rich herbs and berries.

In the summer, the women and children gather berries and certain arctic flora and herbs. Likewise, eggs may be collected in the spring.

With the exception of the whaling each fall, which is a communal event, most hunting is undertaken by individuals alone or travelling in small groups. Trips to the ocean or far up river, are often arranged by several adults using more than one boat, as a safety precaution.

King Eider ducks on the Beaufort Sea, Summer 2015

The hunters call

The goose flies closer

Take aim and fire

One for the pot

We have described the nature of subsistence hunting and the subsistence lifestyle earlier in this report. In relation to a description of the role of subsistence for the community today it is relevant to underline the following:

· For both cultural and economic reasons, subsistence continues to be important to the citizens of Nuiqsut.

· In 2010 79% of Nuiqsut households reported at least 50% of their 2009 diet came from subsistence foods (compared with 67% in 2003). Most households rely on food from subsistence sources for approximately 50% of their food[51] – in some households the reliance on subsistence is higher. Therefore food security is an important issue for Nuiqsut residents.

· Subsistence remains the community activity in which sharing of both the effort and the harvest is most evident. Households that do not have an active hunter rely on relatives and neighbors for their subsistence food. The continued practice of subsistence is vital for the maintenance of the Iñupiat cultural values.

· Subsistence remains the most important activity by which the younger generation learn the language, customs and traditions of their elders. Subsistence is also thus the activity most suited to bring different generations together.

· The subsistence activities and harvest potential of the community have changed in the past 40 years due to changing migration patterns. These changes are due to a variety of factors, including industrial (oil) activity, increased disturbance from air, water and land traffic (including the transport methods of the hunters themselves), changes in the hunting patterns due to social and cultural change (including employment), climate change and natural changes in wildlife migration or behavior. It is difficult, if not impossible, to apportion the relative weight of these factors.

[51] Source: Health indicators in the North Slope Borough 2014, Habitat Heal Impact Consulting – p.25.

· The different measures of mitigation, by which the oil industry in particular strives to compensate the citizens for changes to the subsistence environment and wildlife have made an important contribution to maintaining subsistence activities. Such mitigation initiatives include; mitigation funds, scientific studies, coordination of oilfield activities on the tundra with the local community and the maintenance of the Kuukpikmiut Subsistence Oversight Panel.

· Likewise, the measures of mitigation and support offered by village entities, particularly Kuukpik Corporation, in supporting subsistence have been important – both in terms of supporting individual hunters and in supporting the wider cultural interests of the community. Such initiatives include; fuel subsidies, support to the whaling crews and the continued promotion of subsistence interests when negotiating with the oil industry or outside agencies.

· The maintenance of a subsistence culture in the village remains an issue of importance for all village entities when considering questions relating to development.

· With the growth of oil industry activity around the village, and the ongoing exploration and development in the north east of NPR-A, the need to monitor and protect subsistence resources increases. While the citizens of Nuiqsut are generally in support of development, they are also generally concerned that their subsistence environment and its living resources may be impacted by development.

Although we were unable to conduct a detailed household survey covering subsistence questions, it seems clear that while economic progress has brought many changes to the community, the importance of subsistence has not changed. **It is the way in which subsistence is pursued that has changed.** Access to modern transport methods, made possible by wages and dividend income, has made subsistence easier, as it has made it possible for hunters to more easily combine subsistence activities with employment and family life.

A ptarmigan in its winter plumage

Hunters may have to travel further in pursuit of the subsistence wildlife than in the past, but their modern resources make this possible and reduce the amount of time necessary to be expended on such activities.

There are still several hunters who live almost totally by their subsistence activities, and thus continue to spend a lot of time away from the village on their hunting or fishing trips. But even these hunters supplement their subsistence harvest with seasonal work, dividend income and mitigation payments. Similarly, these hunters are also able to dedicate a major part of their time to voluntary activities in the community.

Perhaps the greatest challenge in maintaining the subsistence culture lies in passing the traditions and skills on to the next generation. With today's hunters spending less time on subsistence activities, there is less time to involve the children in the subsistence work. Similarly, today's young Iñupiat have a wider range of interests and activities which take up part of the time that previously would have been spent helping their parents and elders with subsistence activities. The degree to which the subsistence skills and awareness of individual young Iñupiat suffer due to these factors is largely dependent on how their parents maintain subsistence activities and involve their children in these. It is clear that amongst the younger generation of older teenagers and young adults in Nuiqsut there are several extremely competent and dedicated subsistence hunters, whose commitment to subsistence and the Iñupiat culture will be vital for the future of the community.

While some outsiders may see the subsistence way of life in Nuiqsut as an anachronism, the citizens of Nuiqsut are fortunate in having widespread support for their subsistence culture from the organizations and agencies that have the greatest influence over their destiny. The North Slope Borough, which has the planning authority over the entire Arctic Slope, is controlled by the Iñupiat majority that it represents and, both in Barrow and the other seven villages, subsistence continues to enjoy a high political priority.

Since 1971, the Borough has invested millions of dollars in the study, monitoring and protection of subsistence resources and continues to do so. Similarly, ASRC, as the largest surface and sub-surface land-owner after the state and federal government, has continually supported subsistence on the Arctic Slope. There is also a widespread understanding within the state and federal governments of the importance of subsistence in Alaska's Native communities.

Finally, Kuukpik Corporation's ownership of most of the lands in the Colville River Unit has ensured that the relationship with the oil industry, first with ARCO, later with ConocoPhillips and other oil companies, has for decades been based on an unequivocal acceptance of the subsistence concerns of the community.

In other parts of Alaska where there is a growing non-Native population, the subsistence resources of Alaska's indigenous people have come under considerable pressure from recreational hunters, who as residents of the State of Alaska, have equal rights alongside the Natives to the wildlife resources on state or federal lands.

As a consequence of the number of people hunting for both sports and subsistence purposes, it has been necessary to introduce quotas and bag-limits to protect the wildlife, particularly bears, caribou and moose. While many species on the Arctic Slope are also subject to quotas, the Iñupiat have little competition for the subsistence resources from non-Native recreational hunters, mainly due to the remote location of their lands and the fact that the Native-owned village and regional corporations are able to prohibit outsiders from hunting on their lands.

Along with other Iñupiat and Inuit communities in the Arctic, the Kuukpikmiut from time to time become the focus of interest of the media, various political organizations and many environmental or animal welfare groups, whose agenda in the Arctic are not always aligned with the interests of the Native population.

Grizzly Bear near Nuiqsut, June 2013

In the past 40 years, outside interests – particularly environmental and animal welfare groups, have both opposed the subsistence way of life of the Inuit people, while at the same time sometimes attempting to ally themselves with the Native communities, in opposition to industrial development, particularly oil and mineral exploration. When in opposition to hunting activities, such campaigns have often been detrimental to the Inuit communities, such as happened in the eighties when campaigns against commercial seal hunting off Canada's east coast devastated the otherwise responsible traditional subsistence harvest of sealskins in Greenland. Similarly, in the seventies and eighties campaigns mounted in the urban communities of western nations against whaling almost brought an end to the traditional aboriginal subsistence whaling of the Iñupiat. Were it not for the massive investment in scientific research conducted by the North Slope Borough, that documented the sustainability of the Iñupiat whale hunt, it is likely that the Inupiat would have lost their whaling quota.

Fall whaling from Cross Island

No study or description of the subsistence culture of Nuiqsut would be complete without mention of the annual whale hunt undertaken from Cross Island.[52]

Each fall, up to seven whaling crews from Nuiqsut prepare to hunt their annual quota of four bowhead whales. The fall whaling is the subsistence event that most perfectly defines Nuiqsut as a community characterized by teamwork, consensus, shared experience and a common purpose. Though permitted and regulated by the International Whaling Commission with an aboriginal subsistence whaling quota, the fall whaling at Cross Island is a far cry from the primitive hunt of centuries ago.

[52] For a more detailed description of the fall whaling of Nuiqsut at Cross island, refer to studies by Mike Galginaitis and the writings and photography of Bill Hess (See Bibliography, Appendix 3), both of whom have followed the Cross Island whaling for many years. For scientific studies of the bowhead whale in the Chukchi and Beaufort Seas, refer to Craig George, Senior Wildlife Biologist at the NSB Department of Wildlife Management in Barrow, who is one of the leading scientific authorities on the Bowhead whale (*Balaena mysticetus*).

There is little documentation of how and where the Iñupiat Eskimos hunted whales in the years before the Yankee whalers came to Alaska's waters, but there is ample archaeological evidence that whales were hunted by the Iñupiat long before they had access to modern weapons and methods. Before the late 1800's, subsistence hunting of the bowhead whale in Northern Alaska was probably limited to coastal areas such as Barrow, where the spring and fall migration routes of the whales lay close to the shore and were thus accessible from the beach or ice by skin boats.

In olden days, the nomadic population of the Colville Delta would probably not have been whalers, because the migration routes are far out in the Beaufort Sea, though many may have travelled to whaling villages such as Barrow to participate there.

Communal prayers for a successful hunt and a safe return

The elders who founded Nuiqsut in 1973 had learned to whale in Barrow, so it was natural for them to bring their whaling traditions with them.

Bowhead whales can swim long distances under sea ice, but they do need to surface every forty to sixty minutes to be able to breath. In the spring, as the whales migrate northwards from the Bering Sea to the Beaufort Sea, the open leads in sea ice to the north of the Colville Delta are too far from the coast for spring whaling to be feasible. Therefore Nuiqsut's whalers can only hunt in the fall, when the whales are migrating southwards again and the open water brings them closer to the mainland.

In the first years after 1973, Nuiqsut's whaling crews began whaling from barrier islands close to the Colville Delta before, in 1980, choosing to use Cross Island, north of Prudhoe Bay as their whaling camp - from where they have whaled since.

Cross Island is 63 nautical miles from Nuiqsut as the crow flies, but a journey by river and sea of 85 nautical miles. Here the whaling crews from Nuiqsut have established a whaling camp with accommodation cabins which becomes their home for a few weeks each fall.

Before sailing to Cross Island, the villagers hold a feast which includes prayers for a successful hunt and the safe return of the crews. On the day they leave the village, usually in early September, the community gather at the river and, once again, there are prayers before the crews depart. The boats usually sail in convoys as a safety precaution.

The voyage to Cross Island, together with the subsequent boating in the ocean hunting grounds, can be hazardous at this time of the year, as storms and high winds with rough seas can arise suddenly and before the season is over snow may begin to fall.

The convoy to Cross Island passes West Dock at Prudhoe Bay

Tommy Nukapigak spotting for whales

To undertake the fall whaling, the crews are able to take time off from their regular employment and their families in the village are also involved in the preparation, support and processing. Unlike other subsistence activities, which can be undertaken by single hunters or small family groups, the whaling depends of the involvement of the entire community – and the harvest is also shared by the community.

At Cross Island, they have access to 3G cellular services and maintain daily communication with their families in the village, not least via social media. Their provisions and equipment is transported to the island on barges from West Dock, and their harvest returns to the village by barge and aircraft. In the event of accidents or the need for medical evacuation they can be supported by the North Slope Borough Search and Rescue Service helicopters.

Once at Cross island, the search for the whales begins - first from the shore, later by motorboat, often far from Cross Island.

Sunday church service in the Cross Island cabin before the hunt

The crews take to the sea in search of the whales

It is no easy feat for a crew of four or five whalers to pursue a whale and to approach close enough to make a strike with a harpoon. It requires skill, experience, teamwork and some degree of courage.

Archie Sulluk Nukapigak makes a clean strike just behind the blowhole

There are strict rules governing the actual killing of the whale – it must be pursued by boat and must be struck first by a harpoon with an explosive charge, after which it may be struck by another explosive charge fired from a shoulder gun and subsequently with a lance. The quota of four whales for Nuiqsut covers four strikes, regardless of whether the strike is successful, therefore the whalers must be certain of their kill, and their methods and weapons ensure that the whale is killed quickly. This harvest is regularly monitored by scientists from the NSB Department of Wildlife management and other scientists.

When a whale is caught, there is much celebration. The successful crew hoist their crew flag on their boats, they communicate with the other crews by VHF radio and today, with cellular phone service, the good news can also be sent quickly to the village. The other whaling crews stop their searching and join in a prayer of thanksgiving over the radio, before speeding to help the successful crew tow their whale to Cross Island and land it on the beach.

The butchering process can take a whole day or night, but the crews do not rest until the meat and blubber is cut and ready to be shipped back to the village by barge and aircraft. Immediately after the whale is landed, some meat and blubber is sent home by boat, so that the captain's wife may invite the community to their home celebrate and share in the harvest.

The crews remain at Cross Island and help each other until the quota of four strikes has been used up, or until the whaling captains call an end to the season's whaling. The whale carcass and bones are left at another part of the island, where they will be devoured by the polar bears that are always waiting hungrily while the whalers work.

The crews clear their cabins and pack their gear and begin the journey home. When they arrive, the villagers will turn out in force to give prayers of thanksgiving and to welcome them home, pleased that there will be whale meat enough for the coming year.

A succesful and joyous EMN crew with Nuiqsut's first whale of the season at Cross Island, September 2013

Landing the whale with the help of a winch at Cross Island

Butchering a whale is hard but joyous work

Butchering is accomplished carefully to keep the meat free of sand

The EMN whaling crew is welcomed home to Nuiqsut

The economics of subsistence

Like their forefathers, who adopted the modern whaling techniques of the Yankee commercial whalers, the whalers of Nuiqsut have embraced the tools and technology of their time. They use modern aluminum or fiberglass boats with powerful outboard motors, VHF radios and GPS navigation aids. At Cross Island they have built accommodation shacks for the crews, and they have motor winches and a front loader with which to beach the whale.

The logistics of the fall whaling requires resources that far exceed those required by any other subsistence activity, the cost of which today is beyond the means of the individual whaling captains, necessitating financial support of approximately $270.000 (2015). These funds are provided by various sponsors including Kuukpik Corporation, The North Slope Borough and industry, as well as by the captains and crews themselves.

The complex economy of the whaling is also reflected in all other subsistence activities. To maintain subsistence under modern conditions every hunter is dependent on the system of economic support and mitigation funding that today permeates the village economy. Mitigation payments from the oil industry and economic support from the municipality is not simply calculated on a case-by-case basis to mitigate or compensate for each individual industrial or socio-cultural impact, but rather has become a way by which the village seeks to balance its economic needs with the many impacts and changes that they face. For the oil industry, mitigation funding and other support for subsistence is today more a question of corporate social responsibility than one of direct compensation for specific impacts.

In this way, mitigation, economic support, employment and sponsorship have, over several decades, become an integral part of the subsistence economy. It is a way of thinking that has not only been embraced by the oil industry, but also every other public or corporate entity that seeks to interact with the community. No public meeting is well attended unless the organizers provide a sumptuous buffet and door prizes.

In a community in which there are few full time employment opportunities and high living costs, it is a logical development that the villagers seek to leverage their ownership of the land and their role as "impacted" citizens to receive cash benefits – not only in direct mitigation of subsistence impact, but also as a source of income for attending meetings, consulting with industry and maintaining the democratic process.

To this end, the citizens of Nuiqsut have been successful. But this trend also has a downside which several citizens have expressed. The culture of mitigation and compensation which for many years has characterized the relationship between the Nuiqsaġmiut and outsiders has also influenced the way in which some citizens interact with each other, making daily life less a question of sharing and more a question of bartering – not only for subsistence produce but also for help and cooperation between neighbors. Given the extended kinship between the citizens and the lack of more formal entrepreneurship or small businesses, this trend is perhaps unavoidable.

As a result, subsistence today is quite different from subsistence in earlier times. Today's hunters spend less time hunting. The needs of employment and family life and the availability of fast motorized transport (boats, snow machines and road access to outlying hunting grounds) mean that more people undertake hunting and fishing trips of greater distance but shorter duration than before. Industrial activity and the increased use of faster motorized transport for hunting seems to have driven the wildlife further away from the village, which in turn is leads the hunters to travel greater distances, thus increasing the cost of fuel and transport for subsistence.

Without mitigation of these factors, and without evolving hunting patterns to reflect the urban lifestyle and employment, subsistence would be in decline. Subsistence has not lost its cultural, nutritional or economic importance, but subsistence today is more dependent on the relationship between the hunters and the cash-economy providers of mitigation funds than ever before.

The dependence on revenue or mitigation funding, which ultimately stems from the oil industry, gives the community certain challenges when addressing their concerns about development. In recent years environmental organizations based largely in urban America have attempted to ally themselves with Native communities to oppose mineral or oil development in the Arctic.

The result of such campaigns, paradoxically, has been to restrict exploration on land, where the Iñupiat have some degree of influence and control, and push exploration offshore, where the state and regional governments have far less influence and where the potential impact to the marine environment and important subsistence mammals is of much greater concern for the Native population who live in the region. Compared to onshore production, offshore activities will likely produce far less revenue and benefits – barrel-for-barrel of oil produced – for the State of Alaska and the Native corporations. Although some North Slope villages have entered into an alliance with their regional corporation to ensure their stake in future revenues from offshore oil development, Nuiqsut was one of the communities that chose not to join this alliance.

The current controversy over exploration on the Offshore Continental Shelf (OCS) has led many citizens who live far from the Arctic to confuse the issues and concerns related to offshore contra onshore oil development. In the public and political debate, this important nuance is often ignored, particularly by those organizations that are opposed to "Arctic drilling", a standpoint not necessarily shared by all the indigenous population.

In Nuiqsut, there have been efforts by certain environmental organizations to establish an alliance with the Native Village of Nuiqsut, in opposition to the recent construction of the road and bridges connecting Alpine with CD-5 and the new fields in NPR-A.

Regardless of the merits of both the environmental organizations campaign and the standpoint of NVN, this alliance with an outside organization has created difficulties for the relationship between Kuukpik Corporation and NVN, difficulties which ultimately can only be resolved by renewed consensus within the community. Such an intervention by outside interests can only make such consensus more difficult to achieve.

A trip to the ocean and back can require over thirty gallons of gasoline, even if the hunters come home empty-handed

Melting ice from the Colville River

Defining challenges

In the forty-two years since the resettlement of Nuiqsut, the community has faced many challenges and changes and while the spirit of resettlement from 1973 lives on in the hearts and minds of many of its citizens, there are also new challenges, new concerns and new goals, not least amongst those who have grown up or moved to Nuiqsut in recent years.

Besides being the subject of this report, the question of impact from development is one that is raised in almost every discussion or debate about the village and the course its citizens must chart in the future.

The term "impact" is itself loaded with negative overtones, so much so that one can easily ignore the many aspects of change which the majority of villagers themselves see as benefits. It is our observation, from following life in Nuiqsut for many years, that many of the negative impacts of development in Nuiqsut are themselves unavoidably entwined with the benefits which development has brought.

In attempting to draw some objective conclusions in this report, we have chosen to focus on changes rather than impacts. That development has brought changes is obvious to all, but whether such changes are perceived, experienced or defined as negative impacts or positive benefits is ultimately only something which each citizen of Nuiqsut can decide for him or herself.

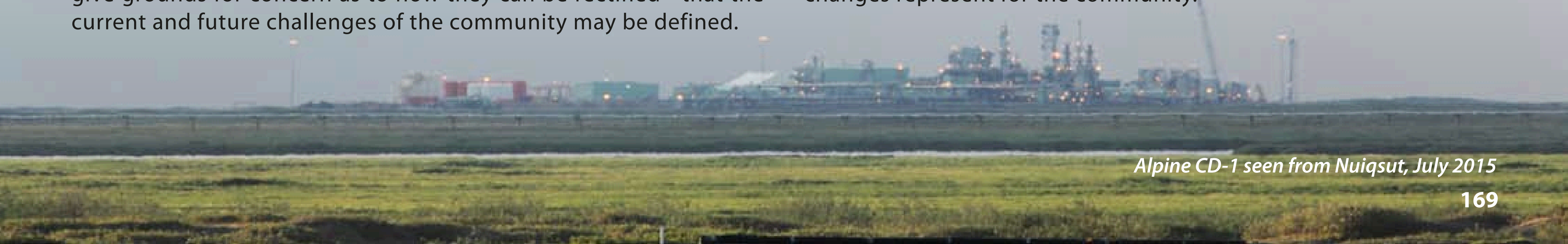
It is in relating to these changes - and deciding whether they have been desirable, and thus should be something to pursue and aspire to in the future, or whether they have been negative, and thus give grounds for concern as to how they can be rectified - that the current and future challenges of the community may be defined.

Blanket toss at Nalukataq in Nuiqsut, 2013

As the researchers and writers of this report, our editorial standpoint on these conclusions is clear.

We seek to describe the changes we have seen and have been told about by the citizens of Nuiqsut. We seek to give voice and perspective to the different views and perceptions that we have experienced during the course of our work, just as we seek to present these issues in a wider context, where the historical, cultural, political or economic factors that have driven these changes may be understood.

In these conclusions we seek to present a summary of these changes together with a summary of the challenges which these changes represent for the community.



Alpine CD-1 seen from Nuiqsut, July 2015

A traditional Iñupiat mask

Demographics

At its inception in 1973, Nuiqsut was a very homogenous community, almost 100% Iñupiat, with most families having kinship ties to each other, to a common history in Barrow, and to forefathers who had hunted and lived in the Colville River Delta for many generations.

This ancient cultural homogeneity was further cemented and strengthened by the act of resettlement and the creation of Kuukpik Corporation, in which most if not all settlers became enrolled as shareholders. Furthermore, the common experience of enduring the hardship of resettlement and the early years of a village in which modern comforts were limited, held the community together and established a bond which endures today between those who shared this experience.

Had this demographic composition and state of equality prevailed unchanged for many decades, the community would have remained united when facing the changes that came from the outside – the growing oil economy due to the development of the North Slope, the discovery of Alpine, and the onset of globalization, the economic, social and cultural effects of which have also impacted the Arctic.

However, this demographic composition did change. By the early eighties, the number of original settlers resident in Nuiqsut had fallen from 176 to approximately 134, while the total population had increased to between 200 and 300. In the years following more Iñupiat, who were neither original settlers nor Kuukpik shareholders, moved to Nuiqsut; some by marriage, some simply choosing Nuiqsut as their home instead of other North Slope villages.

During the same period, capital improvement projects and the growth of the public sector and the village entities also attracted many non-Iñupiat to Nuiqsut, and though few of these outsiders remained in the community for generations, they have collectively become a growing minority in the community.

The ages of the original population in 1973 was a defining factor of the demographic composition of the community in the years to follow. Of the 176 original settlers, 7 were age 60 years and over, 68 were age 20 years to 59 years (with 47 being age 40 or under) and the majority - 101, were under age 20 years (with more than half of these being under age 12).

Despite some divergence due to subsequent newcomers, for which we do not have complete data, this uneven age spread has meant that during the past forty years, the community has seen noticeable fluctuations in the number of its citizens who fall into different age groups. For example, there are currently relatively few older elders, particularly men, to fill the cultural roles which elders traditionally have filled in Iñupiat communities.

While such a situation is not uncommon in small rural communities, the fact that Nuiqsut was settled with such an uneven age distribution has possibly resulted in a greater age spread than otherwise would be the case.

It is perhaps true that the balance today between citizens who have lived in Nuiqsut all their lives, and those who have moved to the community more recently, is moving towards a demographic balance which is similar to that of other communities, especially those in urban areas, where social mobility is greater.

The trend in Nuiqsut reflects thus the trend in American society as a whole, and is not necessarily an inherently negative trend. It is however important to recognize, that it is a trend which gives the community of today quite different social and cultural characteristics and conditions than those that existed in 1973.

A traditional Iñupiat mask

Shareholders and non-shareholders

One natural and unavoidable consequence of the demographic trend in Nuiqsut has been a gradual change in the balance between those residents who are Kuukpik shareholders and those who are not. Non-shareholders include both those who have moved to Nuiqsut having previously enrolled in other village corporations, those who have moved to Nuiqsut, never having been enrolled in another village corporation (most likely due to their being born after 1971 in a village the corporation of which has not yet enrolled afterborn) and those who are children of Kuukpik shareholders, who were born or who have grown up in Nuiqsut, without becoming enrolled.

Since 1973, Kuukpik Corporation has recognized that its prominent role in the community, particularly as the locomotive of economic growth and change, gives it a responsibility, as far as possible within the laws governing village corporations, to pursue benefits for all citizens and to represent the interests of the entire community, regardless of the individual citizen's shareholder status. It is evident that Kuukpik Corporation has pursued this policy, with great success in many respects.

Similarly, through subsistence and other household sharing, the citizens have also ensured that many of the benefits which accrue to Kuukpik shareholders, also indirectly benefit their non-shareholder relatives. However the fact remains, that with the growth of dividend revenue in recent years, the difference between shareholders and non-shareholders has become both greater and more visible.

Like other regional and village corporations, Kuukpik Corporation has long deliberated on the question of enrolling the afterborn. Such enrollment is not only an egalitarian vision, it is also a question of the future viability of the corporation.

The future leadership of the corporation, on which the community depends so heavily, can presently only be elected by those shareholders who have at least 100 shares, and the same limitation governs the voting on any change to the bylaws of the corporation.

Furthermore, the question of the enrollment of afterborn is not a simple matter. It requires a mutually agreeable definition of which citizens qualify as afterborn, and to which generations of afterborn such an enrolment program will apply. It also raises the question of how the existing and future revenues of the corporation will be distributed to a wider shareholder base, and to what extent, in future times of possibly falling revenues, the wider shareholder base will imply falling dividend income for all shareholders.

The current leadership of Kuukpik Corporation is composed primarily of second-generation settlers, whose parents founded the village and who have grown up in Nuiqsut as Kuukpik shareholders. Having been involved in the building of Nuiqsut since their early years, and having worked in positions of responsibility in the community for several decades, many of them are now approaching retirement and are naturally looking to the next generation to assume responsibility for the future of the community. Therefore the board of directors and management of Kuukpik corporation have worked on the question of afterborn enrollment for several years.

In his 2013 president's message, Kuukpik Corporation President Isaac Nukapigak wrote:

"In a continued effort to provide for its shareholders, a top priority for the Corporation is to increase enrollment by focusing on residents born after 1973. The Corporation believes the children of shareholders are entitled to the same benefits and deserve to be included as active participants in all shareholder affairs. Our children are the future leaders of the village and must have a stake in the decisions as well as the benefits that will come from their hard work. Our people share resources and have long believed in passing traditional knowledge generationally. This offering of shareholder rights, in effect ensures the sustainability of our village through our children. Currently we have established a work group to find the best approach for the program and will continue to pursue our goal of including the next generation in shareholder enrollment." [53]

[53] Source: Kuukpik Corporation newsletter, Page 1, Volume 1, Issue 1, Spring 2013

In pursuing the idea of enrolling the afterborn, Kuukpik Corporation's leadership is not only pursuing an abstract idea, the corporation is working to arrive at a proposal which will win the acceptance of a majority of the existing shareholders, without whose votes the enrollment of the afterborn would not be possible.

As President Isaac Nukapigak explains:

"Of the original 212 shareholders from 1973, each of whom received 100 shares, approximately one-third are still alive. The inheritance of original shares, plus the few instances where original shareholders have given some of their shares to their children, means that the original 21,200 shares are now owned by 386 shareholders – of whom less than 50% have 100 shares. Approximately one third of the shareholders enrolled in Kuukpik Corporation before the ANCSA enrollment deadline in 1975, but they have not subsequently come to live in the village – they live elsewhere in Alaska or the lower 48 states."

As of 2015, Kuukpik Corporation has conducted a poll of its shareholders to determine how the afterborn question should be addressed. One proposal under consideration involves the enrollment of the first generation of afterborn (children and adopted children of original settlers with at least ¼ blood quantum) which would include approx. 320 new shareholders. To accomplish this, the holders of original shares must determine who to enroll, and they must decide how many shares to issue to each afterborn, and how much of the original shareholders current dividend they are willing to share with the new shareholders. The enrollment of subsequent generations of afterborn may be a question that is left for future generations of shareholders to determine, on the basis of the experience of the inclusion of the first afterborn.

Kuukpik Corporation President Isaac Nukapigak, 2015

Isaac Nukapigak recognizes that these questions must be addressed; ***"If the new shareholders get less than 100 shares, they will not be able to become board members. This means that with the passing of time, we will run out of shareholders who have 100 shares and thus can vote for changes to our enrollment – this is a problem that must be addressed one day".*** [54]

As with so many aspects of ANCSA and the laws which have been passed subsequently, on could wonder today why the original construction of the regional and village corporations did not account for the fate of those Natives, who at that time were not yet born. The fact is, ANCSA left this question open, to be addressed by each regional and village corporation at some time in the future. Some regional corporations, particularly those such as ASRC, which has met with considerable success in business, have implemented enrollment programs for their afterborn.

Other corporations, especially village corporations in regions where there are few business opportunities, and thus less revenue to share, have not yet addressed this issue. As part of its preparations for an afterborn enrollment program, Kuukpik Corporation has studied the approaches of several other regional and village corporations.

In the longer term, a wider shareholder base that embraces the younger generation is of vital importance in maintaining the broad acceptance in the community of Kuukpik Corporation's leading role. While there will often be natural discussions between the village entities about the division of responsibilities, it is clear that Kuukpik Corporation is the only entity that is both qualified, staffed and legally constituted to fulfill the roles of managing the land, negotiating with the oil industry and providing the economic foundation for the future. It follows, that the greater the number of citizens who have a stake and an involvement in Kuukpik Corporation, more united the community will be in relation to the many aspects of village life for which Kuukpik Corporation has a responsibility.

[54] Isaac Nukapigak, Summary of interview with authors, June 2015

The younger generation are the future of the community

Cultural change

All cultures change over time. History has shown that a culture that does not change or evolve to meet the needs of its citizens in the times in which they are living will eventually die or be swallowed up by other stronger cultures.

Change is neither inherently negative nor positive; such value judgements depend on the perceptions and aspirations of those involved, and should not be defined according to the values of outsiders.

Cultural change is about both how individual citizens are able to pursue the ideas and values which they have grown up with and embraced, and about how those ideas and values themselves change over time.

The citizens of Nuiqsut have seen many changes. Some of these changes were thrust upon them by outside forces, some were of their own choosing, not necessarily as a single concrete choice, but often as a consequence of several other choices, the effect of which becomes evident with the passing of time. To what extent the culture has changed, and whether such changes are negative or positive, is a question to which each individual may have a different answer.

In our interviews with many citizens of Nuiqsut, the times that they remember best and look back on with most warmth are the early years, during which time the citizens shared a common fate and had simple, common goals. With few exceptions, the villagers whom we interviewed recalled the early years as being better than today.

This is not an uncommon theme in many societies, it is part of the human condition, to look back on the past as "the good old days", while at the same time acknowledging that those days were times with harder living conditions and poorer prospects, to which few would wish to return.

As in other parts of the world, we see in Nuiqsut that community and family values are challenged by the more individual values of the modern world, values that are irrevocably linked to economic growth and the ability of the individual to chart his or her own destiny. The choice of education and vocational training, the ability to marry and have children, often with someone from another place or another race, the increased economic independence of the individual from the extended family or the community, bringing with it the freedom to live ones life in different ways. Like every other community, Nuiqsut has seen these changes.

Money has been a driving force in such changes. Cash income brings with it a wide variety of new choices, but also new problems and responsibilities. For Nuiqsut, the changes in the past decade, driven in part but not entirely by the wealth of Alpine, many changes have come very quickly indeed.

One of the greatest changes that industrial and economic development has brought to Nuiqsut, is the growing freedom, ability and desire of most citizens to define their own standpoint with regard to a wide variety of topics which they consider important. This freedom is the result of many factors including; economic growth, education, employment and a general assimilation into the wider American and global society. Increased exposure, through the media, through education and through human interaction, to other cultural values, material comforts and political ideas have also played their part. The successful evolution of democratic institutions within Iñupiat society, such as the North Slope Borough, the regional and village corporations, and the village entities has also contributed to a wider debate and a wider spectrum of opinion and ambition.

John Ipalook from Nuiqsut is one of several traditional Iñupiat drummers in the village.

Forty years ago, the leaders in Iñupiat society were almost synonymous with the elders. But through the lands claims of the sixties and early seventies, and the creation of the corporations and the many industrial businesses, the leadership of many aspects of Iñupiat society has passed to a younger generation of adults, who over the past decades have gained experience and skills in leading their communities and their businesses, in ways for which some the older generation of elders were not equipped.

While the elders continue to command the respect of the community on cultural and subsistence issues and questions relating to traditional knowledge, Iñupiat society has widened the competence and authority of the adults who make up the corporate, business or organizational leadership. This trend has also given rise to a wider spectrum of opinion and political ideas within the community, to which all village entities have had to adapt. It is a process which continues.

It would be too simplistic to attribute such change to a single factor such as the oil industry, or a single development such as Alpine. Though the oil industry in the Colville River Delta and the wealth it has created locally certainly has fuelled and in some cases accelerated social and cultural changes, such change is the result of wider, global socio-cultural trends - trends to which the Iñupiat, particularly the younger generation, are more exposed today than forty years ago.

Though not entirely impossible, it is difficult for any culture to pick and choose between the aspects of progress which become available to them. If a community accepts and embraces economic growth, new technologies and business or political relationships with outsiders, it also embraces the many new forms of dialogue, new challenges about education, employment, health and welfare that follow with these benefits. The best a Native community can do is to discuss and identify those aspects of its own culture, on which it is not prepared to negotiate or compromise, while accepting some other changes as either beneficial or the unavoidable and acceptable cost of progress.

In many ways, this is what the Iñupiat of the North Slope have done for many years. Through their cultural workshops and political discussions, through their regional and village corporations, and through their negotiations with industry, they have identified many aspects of the Iñupiat culture which must be preserved and respected, such as their lands and wildlife, subsistence, sharing, spirituality, Inupiat values, language and the continued ethnic integrity of their communities.

The Iñupiaq language is particularly relevant when evaluating change. Languages, particularly aboriginal languages, are not interchangeable with other major languages which the citizens have gradually embraced. Some words or ideas can be translated, but there are a whole range of ideas and human feelings that defy translation and which only can continue to be expressed and lived, within the context of the continued use of the Native language. In these years, Iñupiaq is under considerable pressure from English. While many elders speak Iñupiaq fluently, often to the exclusion of English, they constitute a decreasing minority. Many of the younger adults speak Iñupiaq less fluently, and because of their employment or other roles in the community, are forced to adopt English for many aspects of their lives.

The younger generation, especially those who have grown up exposed to the English culture of American television and music, to social media and the internet, and to the growing need to acquaint themselves with the technical or academic knowledge that is only available to them in English, are less competent in the Iñupiaq language.

For every generation that follows this course, the gap between the modern world and the world of their elders and forefathers widens.

Future economic trends

Nuiqsut has experienced a decade of relative abundance of money, especially money from passive sources such as dividend income, which the citizens do not have to earn through employment. Through sound negotiations, good business performance in joint-venture businesses and prudent fiscal planning, Kuukpik Corporation has ensured that a major part of the revenue from Alpine has been distributed both as dividends and other benefits in the community.

The continued value of the land base under existing production and new exploration will enable Kuukpik Corporation to maintain a healthy dividend for some years to come. But as exploration and oil production moves away from Kuukpik land, as production in the Kuukpik lands of the Colville River Unit continues to fall, and as the number of shareholders increases, the citizens will eventually face a fall in passive dividend income.

Some of this may well be offset by the continued growth of Kuukpik Corporation's business operations, which will continue to produce revenue and profits wherever they have contracts in the oil patch. The growth of the oil fields around Nuiqsut, and the possibility of service companies near the village, if the community choose to pursue such opportunities, will go a long way to maintaining the economy of the community.

As dividend revenue falls in future decades, the community will have to exploit other opportunities, including employment in the surrounding industries, or in local workplaces that will be based on the revenue generated by local industry. This will bring new challenges concerning employment, education and training, as well as new challenges relating to maintaining subsistence and the local culture.

The citizens of Nuiqsut can view the future economy of the village with optimism, in that it is probable that the oil industry will continue to be active in the region for many years to come, and that each new oilfield, each new well or pipeline, will provide employment, income and other benefits for Nuiqsut.

Climate change and the Arctic environment

For centuries mankind has regarded the Arctic as another world, remote and isolated, and in the eyes of most outsiders, virtually uninhabited and quite separate from the western world. Despite the arrival of outsiders and the colonization of the Arctic, the idea of the High North as a pristine last frontier has prevailed until recent times.

With the growing recognition in recent years of climate change, all that is changing. The importance of the Arctic environment as an integral part of the global ecosystem is now understood. While climate change is perceived as a global challenge, it is becoming increasingly more clear that the Arctic is both the region where the climate is changing most rapidly and the region where even the most marginal change in the climate can have far-reaching implications for the rest of the world. A small rise in average temperatures in the Arctic regions results in quite dramatic impact to the local climate and biotope - and thus the conditions for the existence of humans and all other species. With the North and South polar regions containing the greatest part of the world's ice, it is clear that even a slight rise in the polar temperatures can cause sea levels to rise and weather conditions to change worldwide - a serious challenge for the highly populated regions of the world.

Climate change is evident throughout the Arctic, including on the North Slope. Recent years have seen greater thawing of mountain glaciers, giving rise to increased flooding of the coastal plain, particularly in the Colville Delta, as well as more harsh weather in the Chukchi and Beaufort Seas, where storms and rising sea levels constitute an increasing threat to the coastal communities that are located on barrier islands. Coastal erosion and the erosion of river banks are becoming more commonplace.

Such changes in the marine and tundra environment impact the wildlife. Marine mammals such as polar bears and walrus which live on the sea ice are increasingly deprived of their habitat and are driven onto the land. To scientists and hunters, it is already evident that a warmer climate is bringing new species of flora and fauna to areas where previously they were rare or unknown.

On the tundra to the north of the Brooks Range, once north of the tree line, willow and other trees are beginning to grow higher and in greater abundance than before. Animals such as porcupine are now common in areas up the Colville Delta.

Flooding and storms represent an increased challenge both for the indigenous communities and the oil industry, as installations on the tundra must be designed to cope with these challenges and to mitigate potential emergencies. There are greater concerns from residents and outside environmental organizations concerning the risk of oil spills - particularly in relation to offshore exploration and production, where the risk of impacting the marine environment, and thus the subsistence resources of the Iñupiat, is relatively higher than that associated with onshore activity.

How climate change will affect small communities such as Nuiqsut remains to be seen. In different ways, both the Iñupiat and the oil industry have the ability and resources to adapt to these changes.

But climate change raises questions beyond the immediate local challenges - questions which in time can also impact the delicate social and economic balance of Nuiqsut.

Such questions relate not only to climate change, but also to the global strategic and political factors that influence national energy policy and oil prices. Falling oil prices, combined with the political goals of developing more fossile-fuel free energy sources, can impact the will or ability of the oil industry to invest in new exploration and development, particularly in Arctic regions where the exploration and operating costs are high. While the immediate outlook for the Colville River Unit and the new NPR-A oil pools is positive, any reduction in exploration investment and production activity could have a serious impact for those village communities that are dependent primarily on oil revenue for their economy.

Climate change is therefore another important variable in the future economy of Kuukpik Corporation and the community of Nuiqsut.

Alpine CD-1 seen from across the Nechelik Channel in Nuiqsut during the spring thaw, June 2013

Alcohol and substance abuse

As in many rural communities in Alaska, alcohol and substance abuse (primarily marijuana) are a significant factor in the social and economic health of the community.

Although the importation of alcohol is prohibited by popular vote in the City of Nuiqsut, alcohol seems to be readily available, with residents paying up to $200 per half-bottle of spirits such as whisky that is brought into the village by bootleggers or smuggled in freight. Many residents are unable to gain employment due to their inability to pass the drug tests.

Despite the recent legalization of marijuana for personal use in the state of Alaska, the transport of marijuana via airports or mail is still illegal under federal law, and the sale of drugs is similarly illegal. There is little reliable data available on the amount, availability and cost of marijuana in Nuiqsut, but several individuals have told us that they can spend up to $100 per day on marijuana.

Besides limiting employment opportunities, alcohol and substance use is both an economic problem – the greatest amounts seem to be consumed by those who do not have permanent employment income – and a social and cultural problem, in that – according to the North Slope Borough Police Department and also testimony from local fire department EMT personnel – a high proportion of accidents, domestic violence, petty crimes and health traumas involve alcohol and drugs in some way.

In recent NSB surveys (2007 and 2012), 17% of adults and 22% of high-school students reported binge drinking within the past 30 days. Similarly, 34% of the Native population of the borough self-reported marijuana use and 40% of high school students self-reported marijuana use within the past 30 days. [55]

When questioned about the impact of alcohol and drugs on the household, 28% of household heads reported that they felt that a member of their household had been hurt by the effects of drugs/ alcohol in the past year, with 5% answering "Never", 48% answering "sometimes" and 47% answering "Often". North Slope Borough statistics are slightly lower for alcohol than the Alaska statewide statistics, though marijuana use in the borough is substantially higher than the statewide average – particularly for high-school students.

The use/abuse of alcohol and marijuana in Nuiqsut, most of which goes on behind closed doors, has a social and cultural impact. The influx of oil revenue implies that some citizens can better afford alcohol and marijuana, and for those with a low income, dependence on alcohol and marijuana can imply economic hardship – also for their families who may have to go without domestic essentials.

Given the high number of households comprising many people, alcohol and marijuana use impacts entire families, including the children. Some teachers at the Trapper School have told us that many students, even in the low age groups, are impacted, giving poor attendance and low graduation rates. It is not uncommon, especially following a weekend, for school attendance to drop dramatically and for some of those students who do attend school to be tired and unable to participate in their schoolwork.

Alcohol and marijuana work against the traditional values of the subsistence hunter. Dependence on alcohol and marijuana costs money which otherwise would be used to ensure preparation for hunting, maintenance of equipment and machinery or to provide for the household. Consequently, some citizens often find themselves in desperate need of cash to be able to buy food or to afford gasoline, ammunition or spare parts to enable them to hunt.

In both the oilfields and the village, the consumption of alcohol and the use of marijuana are incompatible with most of the available jobs. This is not a moral issue, it is a question of safety and the need for confidence in the ability and sound judgement of all employees.

[55] These figures are aggregate for the North Slope Borough – specific figures for Nuiqsut are not available Source: ***Health indicators in the North Slope Borough 2014***, Habitat Heal Impact Consulting p.16 (tables 9 & 10) sourced from NSB Department of Health and Social Services (2012)

Native corporations, the oil industry, its contractors and the public sector have done what they can with a zero-tolerance policy on drugs and alcohol in the workplace. Today it is commonplace to expect that employees and new applicants test negative (which in practice means that they haven't used the target substances for several weeks).

It seems paradoxical that although a substantial proportion of the adult population consume alcohol, a majority in the community vote to keep the community dry, every time there is a ballot option on this question. Many residents, particularly elders who have experience from other "wet" or "damp" communities explain this by saying that when other communities have gone "wet" the incidence of domestic violence, accidents, and suicide have increased dramatically – therefore they vote the village dry to protect their young people. One unfortunate result of this is that the young people grow up in a community where alcohol is banned, yet most people drink – often in excess and often in combination with substance use. In this way, the next generation does not get the opportunity to learn to drink alcohol in moderation and the abuse cycle is perpetuated for another generation.

Village leaders, elders, and the churches have been quite vocal on the subject of alcohol, and the churches and religious family members do provide some comfort, support and encouragement to those who have an alcohol problem. Because of the factors described in the aforementioned chapter about the Trapper School, (pp 132-137) the teaching staff have very little influence when faced with students impacted by either their own or their household's alcohol or drug use.

It is worth considering how more of the economic resources of the oil revenue – through the Borough and the community entities - could be better deployed to mitigate the challenges posed by alcohol and drugs in all the North Slope communities.

Despite all the awareness about the dangers of alcohol and substance use, and the efforts of communities to educate their young people, it is tragic that so many young people, particularly young men, have met a tragic end in circumstances in which alcohol or substance use have played some part.

Nuiqsut Cemetery, 2013

Consensus

The goal of reaching a consensus on all important issues and decisions facing the community or tribe has long been an important Iñupiat value. Besides furthering harmony within the community, consensus gives the community strength when dealing with outside agencies.

With regard to oil development, the tri-partite agreement from 1995 has been a vital tool for ensuring consensus in Nuiqsut, and for nearly two decades, the agreement has served the community well.

For the past few years, the consensus in the village has been challenged by a divergence of views concerning oil development and the role of the village corporation, with the Native Village of Nuiqsut adopting a dissenting position on several development issues, including the construction of the Nigliq bridge and the road to CD-5.

In February 18, 2014, the Native Village of Nuiqsut passed a resolution terminating "*any prior agreement authorizing any entity, including Kuukpik Corporation to represent, speak or act on behalf of the Native Village of Nuiqsut*".

It must be underlined that it was not within the scope of this study to research the details of this disagreement or to represent the standpoints of the Native Village of Nuiqsut, therefore our insight into this question is somewhat limited.

Although the opposition of NVN to the CD-5 bridge had little influence on the outcome of construction project itself, it is also evident that the February 2014 decision by NVN to withdraw from the 1995 tri-partite agreement and to furthermore establish an alliance with environmental organizations from outside the village, could have far-reaching consequences for the state of consensus in the community in the foreseeable future.

Having said this, it is also important to see the divergence of views in Nuiqsut in perspective. Given the development and changes that the community has faced in recent decades, combined with many of the social and cultural factors which we have described in this report, it is inevitable that disagreement on development issues will arise from time to time.

In the course of our work for this report and our documentary film, we have conducted interviews with many Nuiqsut residents, who regardless of their position on the relationship between NVN and Kuukpik Corporation have expressed a range of views and opinions on most other social and cultural issues, on which they have shown is a striking agreement and unity of purpose. On the wider questions relating to oil development, cultural change, traditional values, subsistence and the future of their community, the residents of Nuiqsut seem to be in general agreement.

We choose to see this general agreement as evidence that the traditional values of consensus and the avoidance of conflict are alive and well in Nuiqsut, and that they represents the positive force which ultimately will enable the community to put their differences behind them and continue to work together.

Sharing the whale - Nalukataq feast, Nuiqisut 2013

Choices

Most of the changes and challenges which the community of Nuiqsut has faced, and will face in the future, are about choices. While the economic and political realities of Alaska as part of the United States and the global community certainly have impacted the community in many ways, the history of the Iñupiat and their relationship to their land, expressed in modern times through ANCSA, the North Slope Borough, and the regional and village entities, have together given the Kuukpikmiut many opportunities to exercise their own judgment in deciding how to embrace development while protecting those aspects of their culture and way of life which they value.

It is all too easy for outsiders, such as ourselves, to point to the problems, as we highlight the challenges related to employment, maintaining traditions, coping with alcohol, substance abuse or social problems, many of which are easy to define and quantify based on our system of values.

Ultimately, it is neither the values of outsiders nor their ethnocentric expectations that are important for Nuiqsut. While it is true that the citizens must in some cases accept and work with the values of outsiders if they wish to reap the benefits of a business relationship – for example by accepting American standards of health and safety, workplace ethics and fiscal management – such acceptance is an unavoidable compromise in the pursuit of higher cultural and social goals such as the modernization of the community's infrastructure, the improvement of the economy and gaining access to the many social, cultural, educational and economic opportunities which exist outside the community.

Although these goals certainly challenge the traditional Iñupiat values, they are not necessarily in conflict with them. The Kuukpikmiut have shown that it is possible to embrace industrial development while maintaining the values of their forefathers. But like forefathers' values anywhere in the world, it is up to each generation to interpret and define these values for themselves, holding on to that which they can use, while allowing that which no longer serves a useful purpose to fade with the passage of time. For the Kuukpikmiut and their fellow Iñupiat across Alaska's Arctic Slope, such choices have not been taken lightly, and every day, on the tundra, on the river and in the village, one can see that the citizens continue to put their values and traditions into practice.

This then is "The Next Horizon" for Nuiqsut, a vision not so far from that which the original settlers saw and worked for in 1973, yet still a vision that is constantly changing, embracing new challenges, new possibilities and new choices.

Though the outside world and its challenges have come closer, the Kuukpikmiut still have their land and their way of life, as well as the means by which to protect their culture and define their future. The choices are theirs.

Adrian Redmond
Stig Thornsohn

June 2016

Appendix 1 THE ORIGINAL SETTLERS OF 1973

Name	age in 1973
Thomas **NAPAGEAK**	38
Francis Evikana	34
Susie	17
Walter	15
Lucy	14
Vera	12
Elizabeth	11
Ellen	9
Archie	9
Thomas Jr.	5
David **EVIKANA**	36
Florence Solomon	26
Delbert	9
Alice	8
Veronica	5
Steve **HOPSON**, Sr.	67
Terza Ungarook	56
* Dwayne	unknown
Raymond **IPALOOK**	49
Flora Tukle	43
Herbert	14
* John Harry	unknown
* Karen	unknown
Willie **SIELAK**	66
Ruth Egasak	63
Willie Jr.	23
George	13
* Vera	unknown
* Estereena	unknown
Frank **OYAGAK**	37
Irene Napageak	34
Freddie	11
Frank Jr.	9
Walter	8
Joseph	5
Herman	3

Name	age in 1973
Jerry **SOVALIK**	34
Lydia Woods	32
Valerie	9
Cornelia	8
Floyd	6
Conrad	3
David **KASAK**	34
Susie Nukapigak	28
Larry	17
Harland	7
Alice	6
David Jr.	6
Agnes	2
Clay **KAIGELAK** Sr.	58
Kitty Kiganak	57
Jimmie	31
Edith	26
Susie	18
Isaac	13
Mark **PAUSANNA**	55
Nanny Nayukok	50
David	27
Margaret	21
Bernice	8
Percy	3
Jimmy **KASAK**	32
Helen Ahnupkana	32
Rhoda	13
Jimmy Jr.	6
Joeb **WOODS**	41
Alice Masuleak	35
Joeb Jr.	34
George	11
Marlene	7
Jimmy	3

Name	age in 1973
Frank **LONG** Jr.	30
Hattie Matumeak	29
Vernon	9
Jeffrey	8
Florence	5
Christopher	1
Leroy	2 months
David **MASULEAK**	31
Mae Kilapsuk	30
John	11
Archie **AHKIVIANA**	33
Dorcas Tukle	30
Dora Ann	10
Billy	9
Emma Lourie	8
Lucy Mae	5
Loila	3
David **BROWER** Sr.	66
Jane N. Kilapsuk	44
David Jr.	22
Lucy	12
Maria	11
Carl	10
Freddie	8
Niel **ALLEN**	unknown
Annie	49
Maggie	28
* Jim	unknown
Ray **AHNUPKANA**	46
Marjorie Kasak	37
Clarence	12
Roger	9
Lottie	8
Harry	5

Name	age in 1973
Johnny **AHNUPKANA**	36
Irene Brown Tukle	33
Gordon Brown	8
Gloria Brown	7
Ben Tukle Jr.	< 12 months
Wilbur **AHTUANGARUAK**	39
Bernice Kanayurak	35
Ellen Rose	15
Dora	11
Rodney	9
Cyrus	9
Jeus	5
Mamie **MATUMEAK**	unknown
Lucy	15
Gordon	20
* Perry	unknown
Robert **KILAPSUK**	unknown
* Emma (Nita?)	unknown
* Eli	unknown
Paul **OGROOGAK**	51
* David Utuana	unknown
Samuel **KUNAKNANA**	60
Sarah Pausanna	52
Ira	23
Martha	21
Laura Mae	20
Emma Susie	19
Susie	16
Hester Ann	15
Vera Julia	9
Sammy	6
Molly	3

Name	age in 1973
John **AHTUANGARUAK**	34
Mae E. Evikava	44
Delbert Evikava	24
Lottie Mae Evikava	21
Cyrus	19
Joseph	17
Wesley	16
Johnny Jr.	15
George **WOODS**	70
Nannie Woods	68
Abraham	49
Norman **LAMPE**	42
Annie Nayukok	35
Robert	15
Sandra	7
Leonard	6
Edward **NUKAPIGAK**	48
Ruth Ahtuangaruak	48
Joseph	25
Emily	23
Eli	22
Martha	21
Edward Jr.	19
Isaac	16
Robert	15
Jimmie	13
Jonah	12
Thomas Mickey	10
Dora Alice	8
Doreen Alice	7
Dorcas	6
Bessie **ERICLOOK**	56
Harry	13

Name	age in 1973
Patsy **TUKLE**	40
Helen Itta	33
Samuel	18
Donald	18
Eunice Mae	15
George	13
Wallace	11
Leonard	11
Joash **TUKLE**	47
Nita Tazruk	35
Charley	15
Clarence	14
Alfred	12
Juanita	10
Valerie Ruth	9
Dorothy	8

Authors' note

The above list is taken from pages 15-17 of the 1984 BLM study (Galginaitis et al) that included dates of birth for most of the people listed, which for reasons of privacy we have not listed here, instead, where dates of birth were available we show the ages of the settlers in 1973.

In the preparation of this study we have strived to present a definitive list of the original settlers.

The list in the 1984 study includes 176 names, which is the number of original settlers on which most published data and interview testimony with Nuiqsut residents agree.

During our 2015 research we reviewed the 1984 list with the help of Joe Nukapigak and James Taalak, which resulted in the addition of ten names - these are marked with a single asterisk *

The list shown here includes only Inupiat residents of the listed households. Our 2015 discussions resulted in the names of three additional Inupiat residents -

Simeon Tukle
Mark Ahmaka
Price Leavitt (teacher)

We have been unable to ascertain whether these individuals had their own households or whether they joined other households.

Additionally, our 2015 research resulted in the names of two non-Native residents -

Jim Walkamash
Mary Tenner

Mary Tenner was the first school teacher in the village, establishing the first school in a tent in 1973 and remaining in the village for some years. As far as we can ascertain, she resides today in Homer, Alaska.

It is unclear whether the term "original settler" covers only those who arrived in April-May 1973, or whether it also covers family members who arrived later in 1973 or 1974. There seems to be agreement in the village that the original settlers all lived in the tent city before moving into houses. The term should not be confused with original shareholders - some original settlers may have enrolled in other village corporations and some original shareholders were not amongst the original settlers - in fact some have never moved to Nuiqsut.

Appendix 2 GLOSSARY OF TERMS & INUPIAQ WORDS

ACHC	ASRC Construction Holding Company
ADFG	Alaska Department of Fish & Game
AFD	Alpine Fire Department
AFN	Alaska Federation of Natives (State of Alaska)
ANCSA	Alaska Native Claims Settlement Act (1971)
ANILCA	Alaska National Interest Lands Conservation Act (1980)
ANWR	Arctic National Wildlife Refuge
AOC	Alpine Operating Center
ARCO	Atlantic Richfield Oil Company
ASNA	Arctic Slope Native Association
ASRC	Arctic Slope Regional Corporation
BIA	Bureau of Indian Affairs (Federal)
BLM	Bureau of Land Management (Federal)
BOPD	Barrels of Oil Per Day (one barrel = 42 US gallons / 158.97 liters)
boyar	A young boy apprentice on an Iñupiat whaling crew
BP	British Petroleum
CD-1	Colville Delta Drill site 1 (Alpine)
CD-2	Colville Delta Drill site 2 (Qannik))
CD-3	Colville Delta Drill site 3 (Fiord)
CD-4	Colville Delta Drill site 4 (Nanuk)
CD-5	Colville Delta Drill site 5 (New drill site west of Alpine in NPR-A)
CPAI	ConocoPhillips Alaska, Inc.
CRU	Colville River Unit (otherwise known colloquially as Alpine)
CSR	Corporate Social Responsibility
DMS	North Slope Borough Department of Municipal Services
Doyon	ANCSA regional corporation for Athabascan Indian region around Fairbanks
EMT	Emergency Medical Technician
EUR	Estimated Ultimate Recovery (Oil terminology)
GMT-1	Greater Mosses Tooth drill site 1 (in NPR-A outside Nuiqsut on Kuukpik land)
HDD	Horizontal Directional Drilling
ICAS	Inuit Community of the Arctic Slope
Inuit	The Eskimo peoples of Alaska, Canada, Greenland and Chukotka
Iñupiaq	The language of the Iñupiat
Iñupiat	The Inuit Eskimos of Alaska
KBRW	AM/FM Radio station in Barrow, Alaska
KSOP	Kuukpikmiut Subsistence Oversight Panel
Kuukpikmiut	People of the Colville River (Delta)
Ma	Million years ago
mmstb	Million stock barrels
NANA	Northwest Arctic Native Association (Regional corporation for NW Alaska, Kotzebue Region)
NFD	Nuiqsut Fire Department
nigliq	(Iñupiaq) Goose - also the name of the local river, anglicized as Nechelik.
NPR-4	Naval Petroleum Reserve 4 (Alaska) now NPR-A - established 1923
NPR-A	National Petroleum Reserve - Alaska
NSB	North Slope Borough
NSBSD	North Slope Borough School District
NVN	The Native Village of Nuiqsut (Tribal organization for Nuiqsut)
Nuiqsaġmiut	People from Nuiqsut
OCS	Offshore Continental Shelf
PSO	Public Safety Officer
TNHA	Tagiugmiullu Nunamiullu Housing Authority (Barrow based housing organization)
UIC	Ukpeagvik Inupiat Corporation (ANCSA Village corporation for Barrow)
umialik	(Iñupiaq) - Whaling captain
umiaq	(Iñupiaq) Traditional wooden-framed boat covered with skin of bearded seal
VSM	Vertical Support Member – the steel piling and crossbar which supports a pipeline above the tundra

Whitefish drying on a rack at Niqliq Camp, July 2015

SOURCE NOTES REFERRED TO IN TEXT AND FOOTNOTES (Sorted by first footnote / page reference)

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The Kuukpik Hotel - home to Nuiqsut´s visitors and construction workers and a cafeteria for the villagers

For the original settlers, Nuiqsut was the new horizon
for their children and grandchildren, it is the next horizon.

No matter how long one journeys towards the horizon,
the distance yet to be covered remains the same.

Where you are today, is simply there,
where your horizon was yesterday.

The journey continues.
There is no last frontier - only the next horizon

Houses on Colville Street, Nuiqsutr during the 2013 Spring thaw

Appendix 4 PHOTO & ILLUSTRATION CREDITS

Page	*Description*	*Photo credit*
Front cover	Blanket toss Nuiqsut 2013	Adrian Redmond / Channel 6 Television 2013
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11	Prayers at Nalaukataq feast, 2015	Adrian Redmond / Channel 6 Television 2015
13	Nuiqsut Nigliq Street a cemetery	Adrian Redmond / Channel 6 Television 2013
15	An isolated house on the Nuiqsut homesite area	Adrian Redmond / Channel 6 Television 2013
16 (upper)	Geese over the Nechelik Channel, Nuiqsut	Adrian Redmond / Channel 6 Television 2013
16 (lower)	Melting freshwater ice on the Nechelik Channel, Nuiqsut	Adrian Redmond / Channel 6 Television 2013
17 (upper)	The Nechelik Channel to the west of the Colville River main channel	Adrian Redmond / Channel 6 Television 2013
18	Knud Rasmusen during his Fifth Thule Expedition 1921-1924	Knud Rasmussen museum, Copenhagen
19	Kuukpikmiut family, 1895	Nuiqsut Trapper School collection 1998
20	Nuiqsut hunters Vernon Long and Isiah Nukapigak hunting geese	Adrian Redmond / Channel 6 Television 2013
21	Whale meat - maktak - being prepared for a Nalukataq feast	Adrian Redmond / Channel 6 Television 2013
22	The Nuiqsut Dancers perform at a village potluck, Nuiqsut November 2013	Adrian Redmond / Channel 6 Television 2013
25	Diagram show how a bowhead whale is shared	North Slope Borough Dept. of Wildlife (redrawn for this study)
26	Ice floes in Beaufort Sea 2015	Adrian Redmond / Channel 6 Television 2015
27	Isaac Nukapigak portrait	Adrian Redmond / Channel 6 Television 2015
28	Sunrise with frozen vegetation	Adrian Redmond / Channel 6 Television 2013
29	Sunday school at Presbyterian Church, Barrow, early 20th century	Anchorage Museum of History & Art
30	Nuiqsut hunter Bernice Kaigelak spotting for caribou, June 2013	Adrian Redmond / Channel 6 Television 2013
31	Nome, Alaska, June 1903 at the height of the gold rush	Alaska Regional Profiles
32	NPR-A near Nuiqsut and Alpine	Adrian Redmond / Channel 6 Television 2013
33	Tundra Times front page, April 1 1963	IHLC Museum, Tuzzy Consortium Tundra Times Archives
34	September 1969, Alaskan Natives protest agaist oil lease sales	IHLC Museum, Tuzzy Consortium Tundra Times Archives
36	Nixon signs ANCSA , December 18, 1971	Adrian Redmond / Channel 6 Television
37	The twelve regional corporations created under ANCSA graphics & photo)	Adrian Redmond / Channel 6 Television 2015
38	Tundra Times front page, December 22, 1971	IHLC Museum, Tuzzy Consortium Tundra Times Archives
38 - 39	Native leaders in Barrow meet to select ASRC lands, 1972	Alaska Regional Profiles
40	Alpine CD-1 during winter	Adrian Redmond / Channel 6 Television 2013
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44	Eben Hopson, The first mayor of the North Slope Borough	IHLC Museum, Tuzzy Consortium Tundra Times Archives
46	Tents on bluff nearNechelik Channel, June 2015	Adrian Redmond / Channel 6 Television 2015
47	Mae Masuleak portrait	Adrian Redmond / Channel 6 Television 2013
48	April 1973 - the first settlers arrive in Nuiqsut	Alaska Regional Profiles
48 - 49	12 private photos of Nuiqsit tent city life	Kuukpik Corporation & Nuiqsut Trapper School collection
50	The Woods' Camp - December 2013	Sarah Redmond / Channel 6 Television 2013
51	Map of Colville Delta	USGS - map 149 Harrison Bay surveyed 1955 revised 1984
53	The first building materials	Nuiqsut Trapper School collection
54	1973 - Nuiqsut as a tent city	Kuukpik Corporation & Nuiqsut Trapper School collection
55	1976 - Map of Nuiqsut	Nuiqsut School Yearbook 1975-75 (Redrawn for this study)
56	3 x private photos of Nuiqsut tent city life	Kuukpik Corporation & Nuiqsut Trapper School collection
56	Tent city residents with sled	Nuiqsut Trapper School collection
57	Butchering a seal in the early days of Nuiqsut	Kuukpik Corporation / Private collection
59	Rig at Prudhoe Bay 1999	Adrian Redmond / Channel 6 Television 1999
60	Leonard Lampe portrait	Adrian Redmond / Channel 6 Television 2015
61	Long shot of village above bluff	Adrian Redmond / Channel 6 Television 2015
63	The late Ruth Nukapigak preparing maktak outside her house in Nuiqsut, 1999	Adrian Redmond / Channel 6 Television 1999
64	Houses built in the late seventies and eighties photographed in 2013	Charles Redmond / Channel 6 Television 2013
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69	Alpine CD-4 and Doyon Rig 19 seen from Nuiqsut 2013	Sarah Redmond / Channel 6 Television 2013
70	UGNU Discovery well 2 in the Kuparuk River Unit	Adrian Redmond / Channel 6 Television 1999
71	Map of central North Slope showing proximity of Nuiqsut to Kuparuk and Prudhoe Bay	NOAA map with graphics by Adrian Redmond / Channel 6 Television
72	Drilling at Alpine CD-1 in 1999	Adrian Redmond / Channel 6 Television 1999
74	Joseph Nukapigak Sr. portrait	Adrian Redmond / Channel 6 Television 2013
76	A community meeting between the oil industry and the villagers of Nuiqsut	Adrian Redmond / Channel 6 Television 2013
79	Central Nuiqsut seen from Fourth Avenue	Adrian Redmond / Channel 6 Television 2013
80	The CD-4 pad at Alpine	Adrian Redmond / Channel 6 Television 2013
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104	Hunters and biologists checking nets during ice fishing season	Sarah Redmond / Channel 6 Television 2013
106	A helicopter at Alpine 2013	Adrian Redmond / Channel 6 Television 2013
107	A biologist from Arctic Biological Research monitors the whitefish harvest	Sarah Redmond / Channel 6 Television 2013
107	A day's harvest of whitefish from the ice fishing, November 2013	Sarah Redmond / Channel 6 Television 2013
108	Alpine tanker truck crossing new bridge to CD-5	Adrian Redmond / Channel 6 Television 2015
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129	<ap showing land ownership in Colville Delta	ConocoPhillips Alaska Inc.
130 (left)	Assembly of God church, Nuiqsut	Charles Redmond / Channel 6 Television 2013
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137 (lower)	Trapper School seen from Second Avenue	Charles Redmond / Channel 6 Television 2013
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144 (left)	Linesman working	Adrian Redmond / Channel 6 Television 2015
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145	Nuiqsut seen from south with satelite dishes	Adrian Redmond / Channel 6 Television 2013
146 (lower left)	Aircraft at Nuiqsut airport	Adrian Redmond / Channel 6 Television 2013

Page	*Description*	*Photo credit*
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170	A traditional Inupiat mask (man)	Adrian Redmond / Channel 6 Television 2012

Page	Description	Photo credit
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197 (below)	Eider ducks over the Beaufort Sea, July 2015	Adrian Redmond / Channel 6 Television 2015
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Twenty-three ducks flying east

Location filming at Alpine for "The New Horizon" documentary, 2015

ABOUT CHANNEL 6 TELEVISION DENMARK

Established in 1984 by Englishman Adrian Redmond, Channel 6 Television Denmark is a full-facility television, film and media production company serving broadcasters, industrial and corporate businesses, private organizations and the public sector with a range of media production and strategic communications services.

Since the eighties, Channel 6 Television has been particularly active in the Arctic, covering documentary productions and research assignments focusing on the politics, cultures and modern history of the Inuit of Greenland, Canada, Alaska and Chukotka. During almost three decades, the company has built up a wide range of contacts and a wealth of production experience in the Arctic.

The company's work in Alaska can be traced back to 1997, when the company was commissioned by the Home Rule Government of Greenland to undertake a research project documenting the impact of oil and mineral development on the Native cultures and communities of Alaska, with particular focus on the Iñupiat of the North Slope and the North West Arctic region. This project, which was immediately followed by the production of a four-part documentary television series – "Native Experience" – covering the same subject, was intended to provide information to the Inuit of Greenland who were, and still are, preparing for what could become a similar oil and mineral development in their country.

Episode 2 in the "Native Experience" series was entitled "The New Horizon", and told the story of the founding of Nuiqsut in 1973 and the years up to the establishment of the Alpine oilfield in 2000.

Channel 6 Television has continued to maintain a relationship with Native organizations and corporations and the oil and mining industry in Alaska. Since 2012, the company has worked on the research for this report, parallel with the production of a new documentary film about the village of Nuiqsut.

This new documentary film, which at time of the release of this study is currently in post-production, is also entitled *"The Next Horizon"*, and drawing on the research of this report, will be a sequel to the original film, bringing the story of Nuiqsut and Alpine up to 2015.

Both of these projects have been realized in close cooperation with ConocoPhillips Alaska, Kuukpik Corporation and the community of Nuiqsut.

Channel 6 Television Denmark is currently working on the research of new films and study projects in Alaska which follow a similar theme.

The original "NATIVE EXPERIENCE" four-part television documentary series, of which Episode 2 "*The New Horizon*" tells the story of the settlement of Nuiqsut and the discovery of Alpine (published in 2004) is available on DVD.

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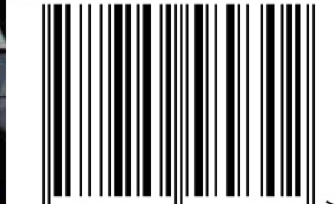
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