CITY OF OUZINKIE
KODIAK ISLAND, ALASKA

COMPREHENSIVE DEVELOPMENT PLAN

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KODIAK ISLAND BOROUGH

JULY 1984

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625 West Fifth Avenue, Anchorage, Alaska 99501, U.S.A.
Phone (907) 276-1819 Telex 294554 NORC UR

OUZINKIE
COMPREHENSIVE DEVELOPMENT PLAN
City of Ouzinkie
Kodiak Island Borough, Alaska

July, 1984

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Prepared by:
NORGAARD CONSULTANTS

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Kodiak Island Borough Assembly

Jerome Selby, Mayor
Phillip Anderson
Ann Barker
Frances Cater
Dennis Murray
Edward Naughton
David Wakefield
Lorne White

Kodiak Island Borough Planning and Zoning Commission

Ken Gregg, Chairperson
Virginia Crowe
Tim Hill
Dan James
Marlin Knight
Fred Patterson
Steve Rennell

Ouzinkie City Council

Zach Chichenoff, Mayor
Angeline Anderson
Refugio (Duke) Delgado
Willis Garner
Clifford Panamarioff
Walter Shuravloff
Evelyn Mullen

Linda Freed, Acting Borough Manager

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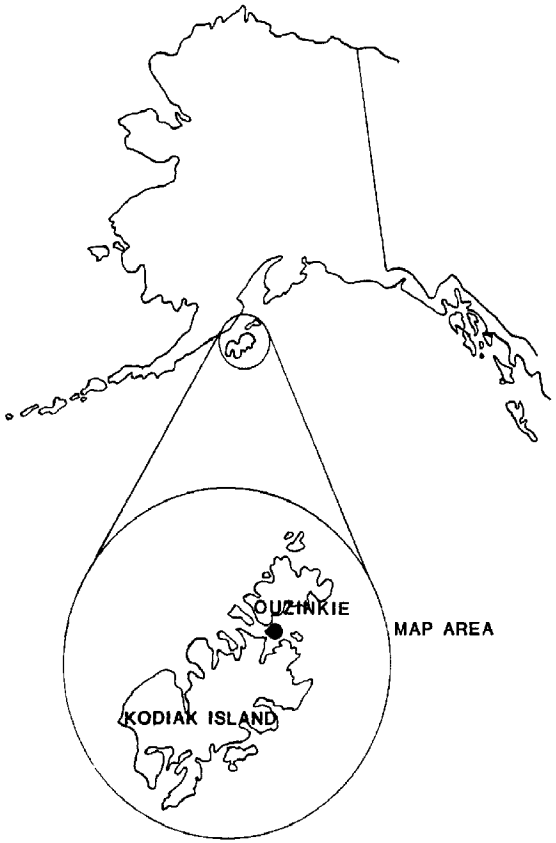
SETTING AND ENVIRONMENT

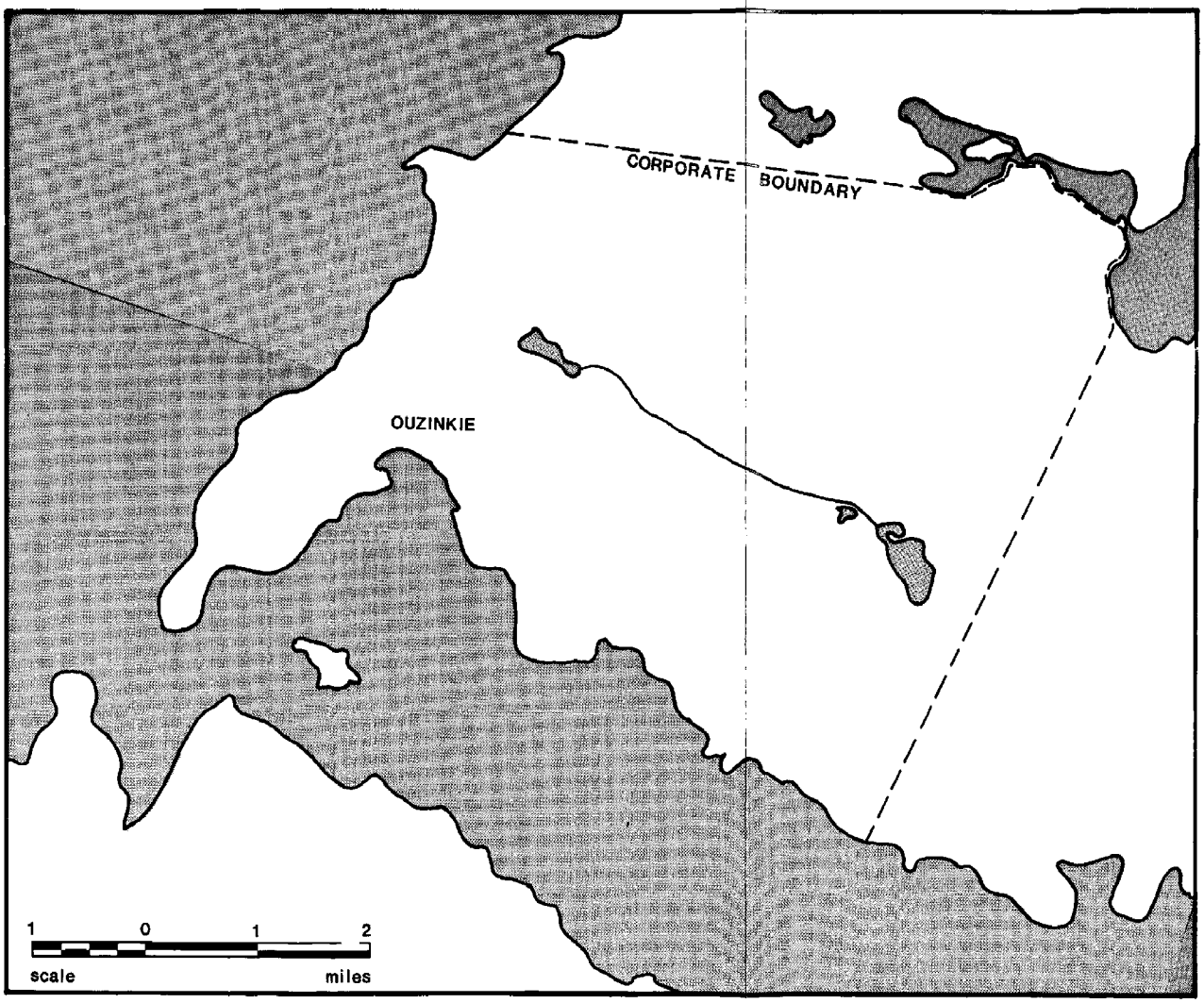
HISTORY

The City of Ouzinkie is located approximately ten miles north-northwest of Kodiak on the western coast of Spruce Island. The community, incorporated as a second class city in 1967, is situated on Narrow Strait, which separates the village from Kodiak Island. (See Fig. 1)

Ouzinkie has one of the longest histories of Kodiak Island settlements. Its modern history began in the early Nineteenth Century with the establishment of a Russian "retirement community" on the current township site. Fish processing began in the community in 1889 with construction of a cannery by the Royal Packing Company. This was followed immediately by another plant under the stewardship of the American Russian Packing Company. This development was complemented with construction of the Russian Orthodox Church, one of the community's historical landmarks.

The fishing industry flourished through the years with new canneries replacing those that were destroyed by fire. The Ouzinkie Packing Company cannery was destroyed by a tidal wave resulting from the Good Friday Earthquake in 1964. Columbia Ward purchased the remains but did not rebuild the cannery, only the store





LOCATION MAP
FIGURE 1

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and dock. The Ouzinkie Seafoods cannery was built in the late 1960's but burned shortly after its sale to Glacier Bay in 1976.

Since this fire, Ouzinkie fishermen have had to utilize fish-processing facilities in Kodiak in addition to occasional enterprise relationships with a floating processor.

LOCAL GOVERNMENT AND NATIVE CORPORATIONS

City of Ouzinkie

The second class City is located within the Kodiak Island Borough, which is a second class borough. As a second class city it has a seven-member city council elected at large. Terms for council members last three years and are staggered to allow local elections for two seats every year. The mayor, vice-president and the secretary are elected from the council by its membership.

The city has assumed most of the local powers allowed by Alaska State Statutes, including the following:

- Streets and sidewalks
- Sewers and sewage treatment
- Harbors, wharves and other marine facilities
- Health services
- Cemetaries
- Electricity
- Water
- Libraries

-Recreation
-Solid-waste management
-Fire protection

The city assesses and collects a 3% sales tax. Other principle income is derived from user fees for services, federal and state revenue-sharing programs and other state and federal grants and programs.

The city employs a city clerk and a bookkeeper for the utility. In addition, operators are employed for both the power plant and the water plant. The Kodiak Area Native Association shares costs for employing the water plant operator.

Kodiak Island Borough

The Kodiak Island Borough, a second class borough, is incorporated under the statutes of the State of Alaska. The governing body is composed of an elected seven-member assembly and a mayor.

The Borough has the power to levy taxes and has assumed the responsibility for planning and zoning, park and recreation programming and education on a borough-wide basis.

The Borough is administered by an appointed manager. The Borough Planning Department is

responsible for planning, zoning and subdivision for all borough communities, including Ouzinkie.

Ouzinkie Traditional Tribal Council

The Ouzinkie Tribal Council is recognized by the Bureau of Indian Affairs as the official tribal governing body of the village. As such, the Council is eligible to administer a range of federal programs, such as health care, employment assistance social services and tribal operations. The Ouzinkie Tribal Council works closely with the Kodiak Area Native Association for many programs and services offered to the Native residents in the community.

The Tribal Council is composed of seven members, elected at large.

Ouzinkie Native Corporation

The Ouzinkie Native Corporation has received either patented or interim conveyance claim to approximately 40% of the land to which it is entitled under the Alaska Native Claims Settlement Act (ANCSA) of 1971. The Corporation owns the surface rights to this property, while the subsurface rights are owned by Koniag, Inc., the regional corporation.

Koniag Regional Corporation

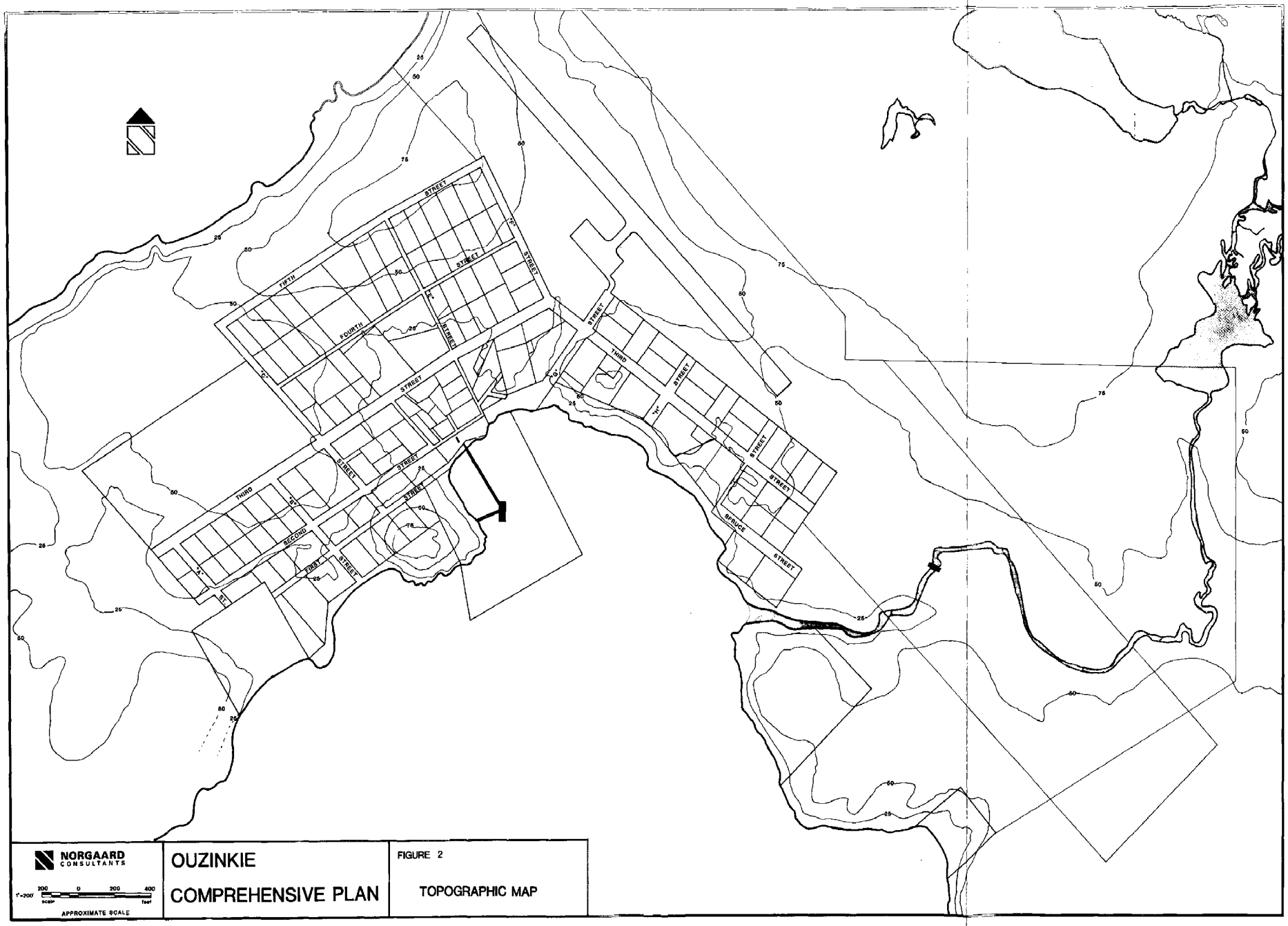
Pursuant to the same ANCSA legislation, Koniag, Inc. is entitled to land selections of its own as well as to the subsurface rights to the lands conveyed to Ouzinkie Corporation.

TOPOGRAPHY

The City of Ouzinkie is located in a cove and constructed on a bluff which rises 30-70 feet above sea level. The bluff rises with slopes that are approximately 1:1. (Tetra Tech., 1982).

Located on Spruce Island, the topography of the area resulted from volcanic and marine sedimentation. Extensive periods of glaciation and uplifting have resulted in the carving of deep and narrow straits and steep bluffs. Because of this extensive glaciation, the slopes and ridges on Spruce Island are relatively smooth and rounded.

Katmai Creek runs into the community from the confluence of two drainage ravines that run toward the shore from separate small lakes and form the city's watershed. (See Fig. 2)



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1"=200' 200 0 200 400 scale feet

APPROXIMATE SCALE

OUZINKIE

COMPREHENSIVE PLAN

FIGURE 2

TOPOGRAPHIC MAP

CLIMATE

With its proximity to open Gulf of Alaska waters, the climate of Ouzinkie is maritime in nature and closely resembles that of Kodiak. Typical of the maritime weather are the moderately heavy precipitation (approximately 60 inches per year) the predominately cool temperatures (with little variation and seldom below freezing) and the frequency of clouds and fog.

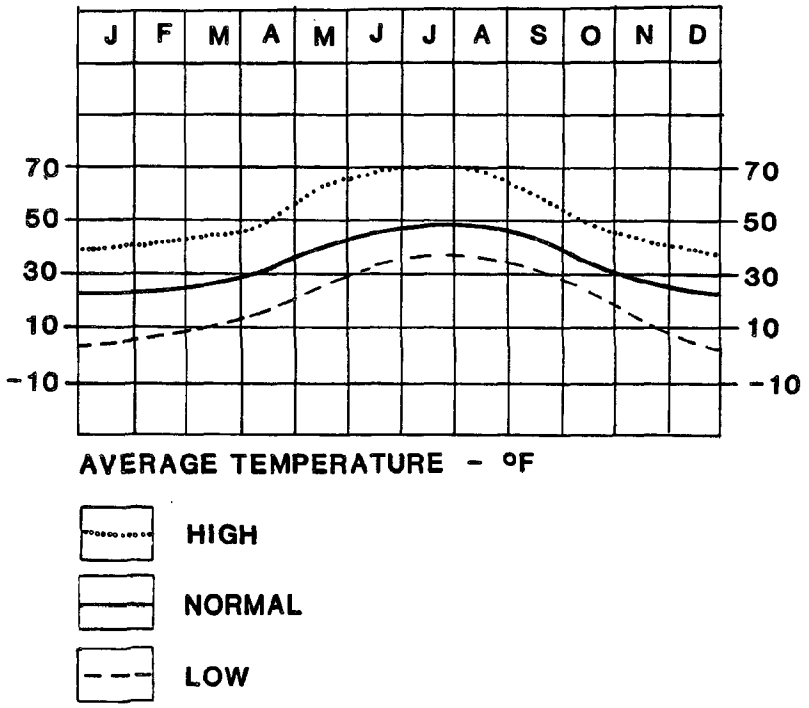
The mean maximum temperatures range from 62 degrees in the summer months (July and August) to 32 degrees during the winter months (December to February).

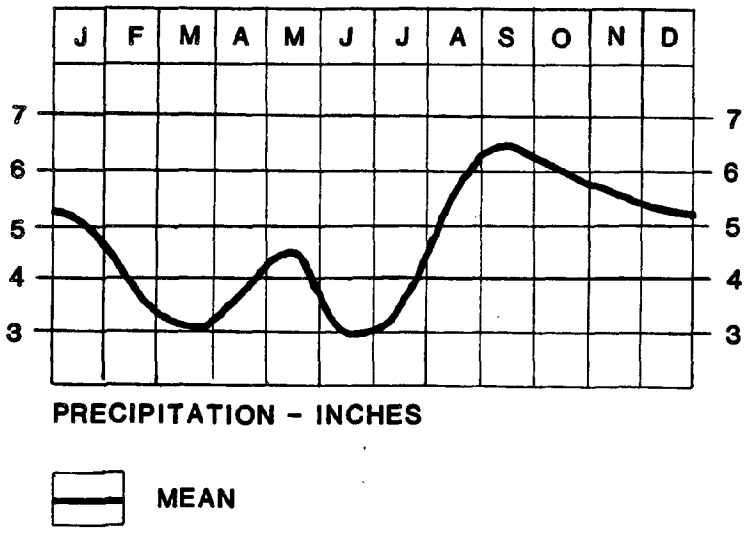
Snowfall averages 87 inches per year, falling from December through March. (Tetra Tech., 1982)

Winds in the Ouzinkie area can become quite strong both as a result of winds being captured by narrow, steep valleys and funneled toward open water and as a result of strong storms over the Gulf of Alaska. These storms can create local winds of up to 75 knots.

These storms often remain stationary for long periods and can cause strong wave action to develop hitting particularly hard on any shorelines that face to the east. (Dowl, 1981)

Figure 3 displays the basic climatic data for the maritime system that predominates over the Ouzinkie area.





CLIMATIC DATA

FIGURE 3

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GEOLOGY

The geology of the Kodiak Islands dates from marine sedimentation and volcanic activity during the Creteceous and Jurrasic periods of the late Mesozoic era. Rock composition is mostly greywacke, slate and argillite in associtation with conglomerate and volcanic detrites. (Tetra Tech., 1982)

Extensive uplifting combined with extended periods of glaciation carved the narrow, steep valleys and straits typical of the region. The rounded nature of the lower hills is also due to this action. (Dowl, 1981)

Soils throughout the area are relatively shallow. Poorly drained soils are common. Surface deposits are found principly in valley bottoms and along the coastal plains. Given the predominance of unconsolidated materials, development on slopes which exceed 10-15% should be evaluated closely. (ESE, 1982)

FISH AND WILDLIFE

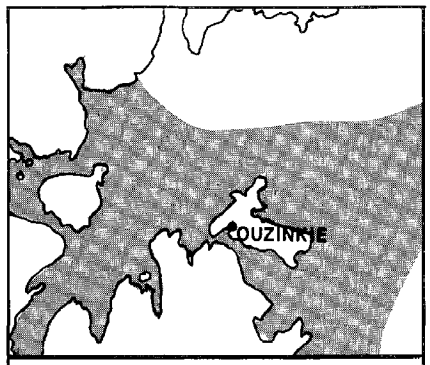
Fish and wildlife abound on Spruce Island and in the area, with species and quantities typical of the Kodiak Islands. The use of this resource falls into three major classifications: commercial, subsistence and recreational or sport. (See Fig. 4)

Commercial

Commercial activities are confined to fishing and the utilization of the fish-processing facilities in Kodiak.

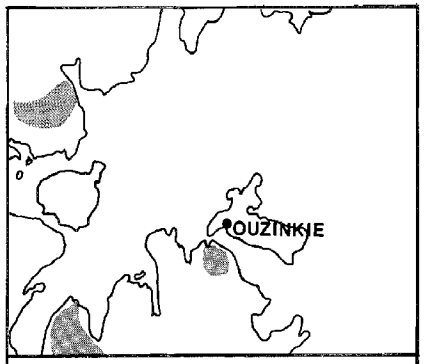
Most Ouzinkie-based fishermen are engaged in the salmon fishery, both through gill-netting and purse-seining. Local permits also are held for herring, crab and halibut, however.

The collapse of the crab industry in recent years has resulted in conversion of many vessels in the Kodiak area for other fisheries. Joint ventures, including shore-based Kodiak harbor-processing facilities, have begun to engage more heavily in the bottomfish industry. This fishery, with its abundance in the waters of the Gulf of Alaska just outside of and north of Kodiak, offers one of the strongest long-term economic



WATERFOWL

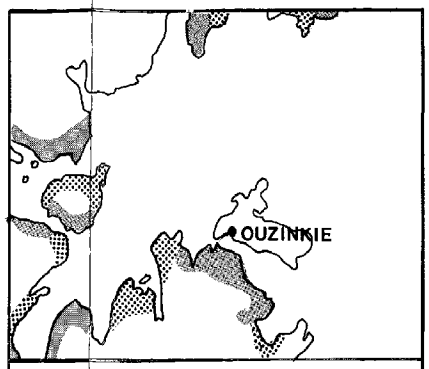
WINTERING AREAS



BROWN BEAR

DENNING — SUSPECTED

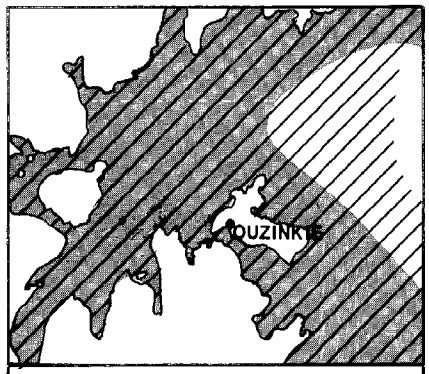
INTENSIVE USE — SPRING/FALL



SITKA DEER

HIGH DENSITY WINTER RANGE

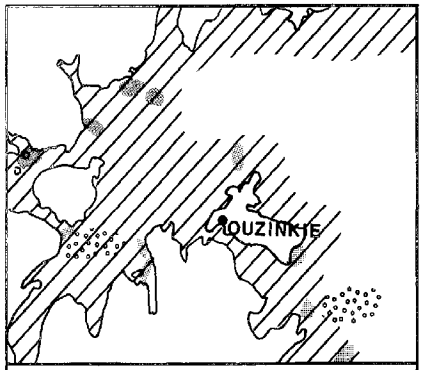
LOW DENSITY WINTER RANGE



CRAB REPRODUCTION AREAS

KING CRAB — VITAL REPRODUCTION AREA

DUNGENESS CRAB — VITAL REPRODUCTION AREA

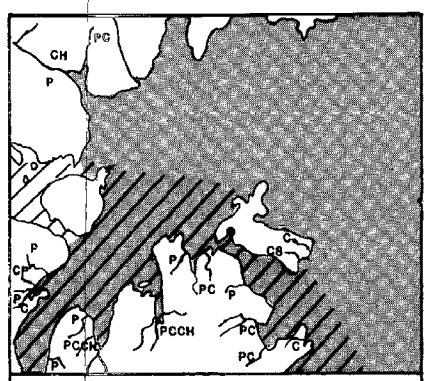


MARINE MAMMALS

HARBOR SEAL — PRESENT

WHALE — PRESENT

HIGH DENSITY



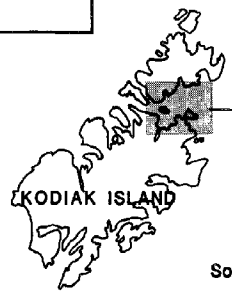
ANADROMOUS FISH STREAMS
SHRIMP AND HERRING

C-COHO
P-HUMPBACK
CH-
S-SOCKEYE

ANADROMOUS STREAMS

SHRIMP REPRODUCTION

MAJOR HERRING CONCENTRATIONS



RESOURCE MAP AREA

WILDLIFE RESOURCES
FIGURE 4

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Source: Kodiak Island Borough Coastal Management Program

foundations for the American fishing fleet in Alaska waters.

Commercial halibut fishing also is present as is the depressed crab fishery for King, Tanner and Dungeness.

Subsistence

Subsistence harvesting in the Ouzinkie area utilizes most available fish and wildlife species. These resources include shellfish, finfish, waterfowl, small and big game. Subsistence activities occur over a relatively wide area around Ouzinkie. These activities center on Spruce Island, the east side of Ouzinkie Narrows and Marmot Bay and extend to Kazakof and Duck bays as well as to Sharatin Bay and Whale Island. (Kodiak Island Borough, 1983)

Subsistence resources include crab, shrimp, halibut, salmon, trout, duck, rabbit and deer.

Most residents rely heavily on subsistence hunting and fishing to supplement their daily foodstuffs. Measured on the basis of a cash economy, 47% of the local population were considered to be low income.

Sport

Because of the seeming abundance of the resource, Kodiak Island has long been a traditional location for sport hunting and fishing. The trophy class Alaskan Brown Bear has drawn hunters both from in and out of Alaska. The population of deer on the islands also has drawn large numbers of state residents in recent years.

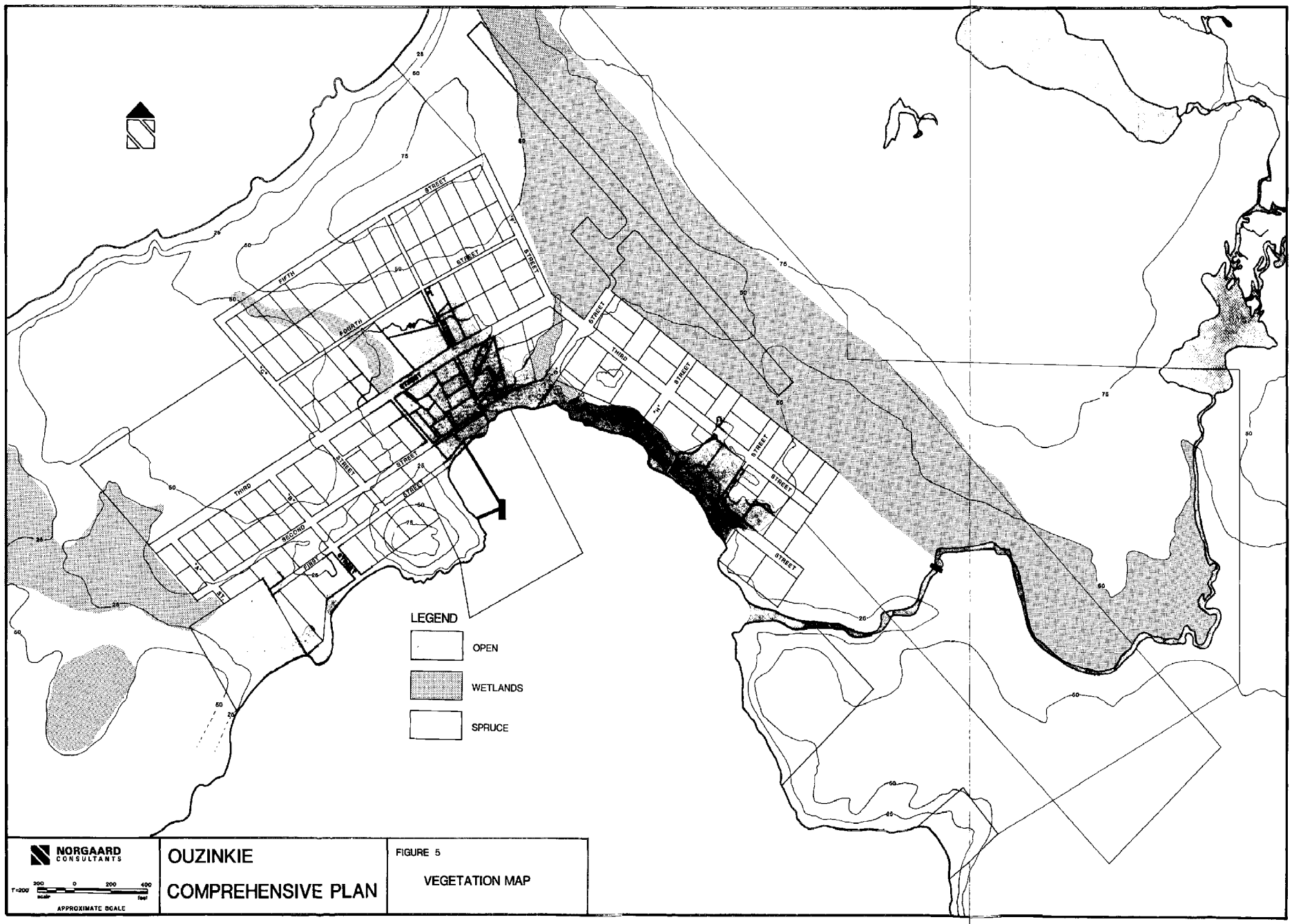
The areas in which Ouzinkie residents draw their subsistence harvests also are favorites of the sport hunter for two reasons. First, the areas are more easily accessed than others in Alaska due to both air and sea transportation systems. The areas are close to Kodiak, which serves as a convenient hub and jumping-off point for the sport hunter. Second, the bag limit for the deer has been four, which has encouraged out-of-region hunters with limited time available for their hunt to converge on the area with populations easily accessible from Kodiak.

VEGETATION

Spruce Island, on which Ouzinkie is located, is typical of such northern Kodiak Islands, with its heavily forested, tall stands of Sitka Spruce.

Beneath the high cover of these tall stands of spruce and hemlock are under-story plants, such as bluejoint and beach rye grasses, devil's club, ferns, salmonberry and high bush cranberry. In addition, especially where soil depths will not support timber stands or where new growth is initiated, alder and willow abound.

Ouzinkie is somewhat unique among Kodiak Island communities due to its location among the tall timbers of the northern islands. (Dowl, 1981) (See Fig. 5)


LEGEND
OPEN
WETLANDS
SPRUCE
FIFTH
FOURTH
THIRD
SECOND
FIRST
STREET
NORGAARD CONSULTANTS
1"=200'
200 0 200 400
scale feet
APPROXIMATE SCALE
OUZINKIE
COMPREHENSIVE PLAN
FIGURE 5
VEGETATION MAP

CURRENTS AND COASTAL PROCESSES

Tidal action at Ouzinkie is semi-diurnal, with two high and low tides being experienced within a 25-hour period. The high and low tides are unequal in magnitude. Tides reach their high and low maximums approximately 14 minutes later than at Kodiak Harbor. (Tetra Tech., 1982)

Tidal range is approximately 9.1 feet, as measured between mean higher-high water and mean lower-low water. A mean tide is measured at 4.6 feet with maximun tides exceeding 11 feet. (NOAA, 1981)

While heavy swells can set into Narrow Strait during periods of storms in the Gulf, the easterly and southeasterly gales generated by these storms create waves that are well dissipated by the time they reach the shoreline at Ouzinkie. However, this is not always the case, depending upon the severity of the particular storm. A combination of two catastrophic events and the normal erosion process generated by this wave action has caused serious shoreline and bluff erosion alnog the Ouzinkie coastline. (Tetra Tech., 1982)

Tidal currents near Ouzinkie ebb and flow at 1.3 to 1.5 knots. Currents near Marmot Bay range from 1 to 3 knots. (Dowl, 1981)

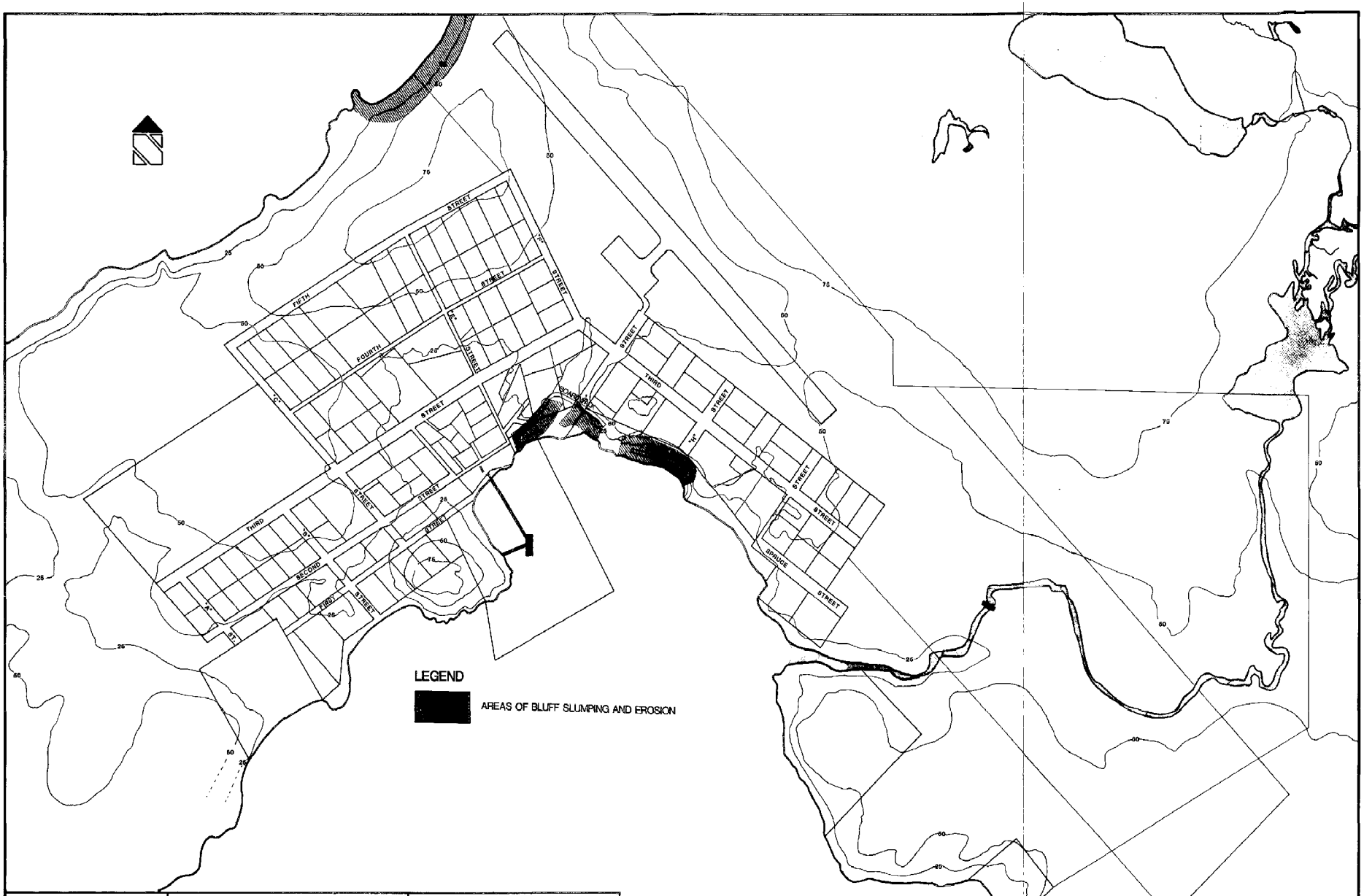
SHORELINE EROSION

The regular erosion process, particularly at the community's edge, coupled with two relatively recent catastrophic events have led to serious problems that threaten municipal and private structures.

Shoreline and bluff erosion at Ouzinkie led officials to seek an analysis of the problem (Tetra Tech., 1982), which concluded that unabated erosion will lead to continued land loss, destroy the city's boardwalk, and physicaly undermine a cemetery, the Russian Orthodox Church and several residential structures. The specific areas of concern are shown in Figure 6.

The study determined that the erosion is the result of surface processes and not initiated or supported by sub-surface instability, such as rotational failure. In reviewing the causes of surface erosion action, the following general agents were cited:

- -wave and current induced erosion
- -surface water runoff
- -freeze-thaw/soliluction
- -human activities



OUZINKIE

COMPREHENSIVE PLAN

FIGURE 6

AREAS OF EROSION

MAP PRODUCED FROM MAP BY TETRA TECH, SEPTEMBER 1992

Several alternative actions have been proposed, including a "no action" option. Not taking any action will lead to the damages noted above, although in a time period which is uncertain. With additional severe storm actions, such as those experienced in 1980, the erosion will be accelerated. Without such "catastrophic" agents and with construction of a planned breakwater for the Ouzinkie Harbor, the erosion process will be slowed.

The alternatives for action fall into two categories, structural and non-structural. Structural actions include stabilization by means of quarry stone rip-rap, gabion revetments or a sheetpile bulkhead. Reconstruction of the drainage system on the slopes is a common element of any alternative of any scope. Non-structural actions are the revegetation of exposed slopes, the relocation of exposed structures and the relocation of human activity and traffic in the immediate area.

The erosion study offered the following recommendations for local action in implementing erosion-control measures, regardless of any specific structural and non-structural actions taken:

- Regulate foot traffic in the area
- Prohibit hauling of firewood over the slopes
- Maintain and frequently inspect the City's sewer outfall system
- Prohibit future construction near tops of the bluffs.

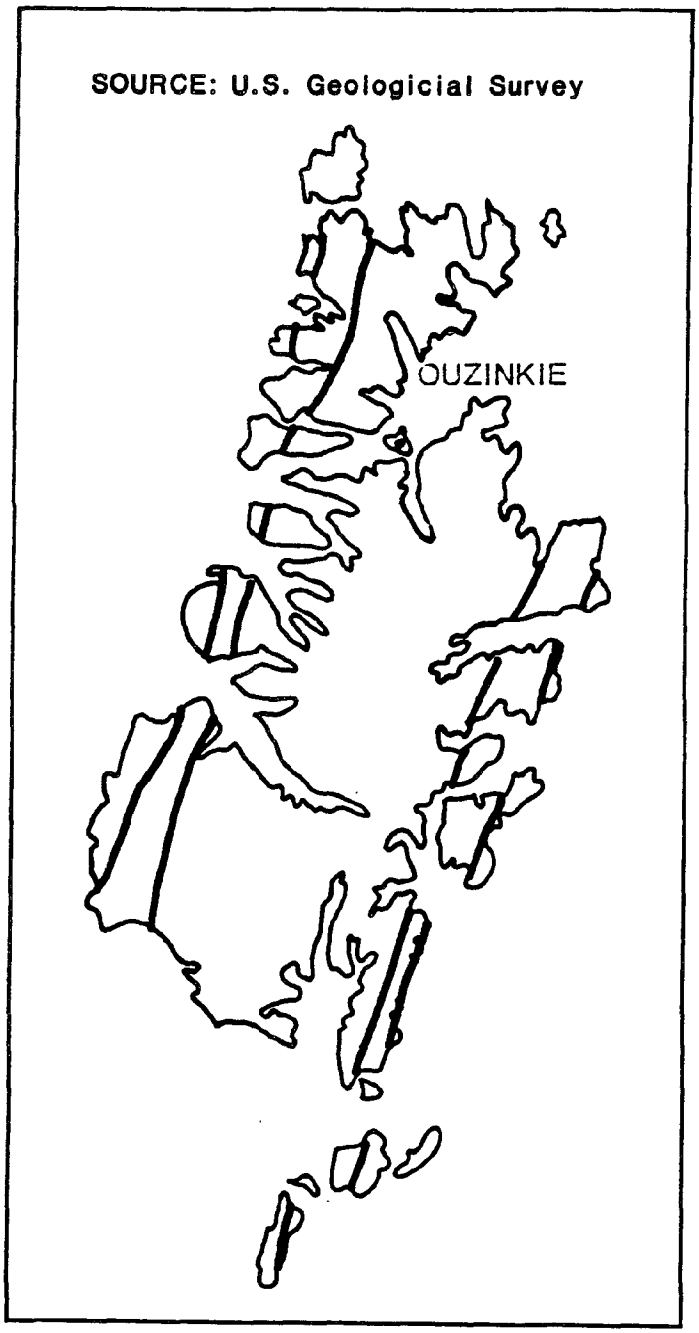
HAZARDS

Geologic hazards for the Ouzinkie area are those associated with the regional tectonism of the area. According to recent investigations (Kodiak Island Borough, 1983), there are no local landslide threats and no faults located in the immediate area.

The regional tectonism, however, is capable of producing far-reaching impacts. Volcanism in the active ranges to the north and west can produce great amounts of gas and ash that can blanket wide areas, as experienced across the Kodiak Islands in the Mt. Katmai eruption of 1912. Acid rain also is a common threat as volcanic gasses are mixed with precipitation and fall over wide areas.

Major fault lines are located throughout the Kodiak Islands. (See Fig. 7) Any coastal community can fall prey to tsunami damage if the location of the epicenter and the direction of waves are correct.

Oceanic hazards are those associated with high waves and erosion action, especially affecting unprotected sedimentary shorelines and exposed



MAJOR FAULT LINES

FIGURE 7

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bluffs. These have been examined in greater detail for the Ouzinkie area in the previous section of this document.

Riverine flooding is not significant in the Ouzinkie area (Kodiak Island Borough, 1983). The streams are small and any overtopping would be restricted to the low-lying areas bordering them. These associated stream floodplains are narrow and only would threaten structures built quite close to the streams.

CULTURAL ENVIRONMENT

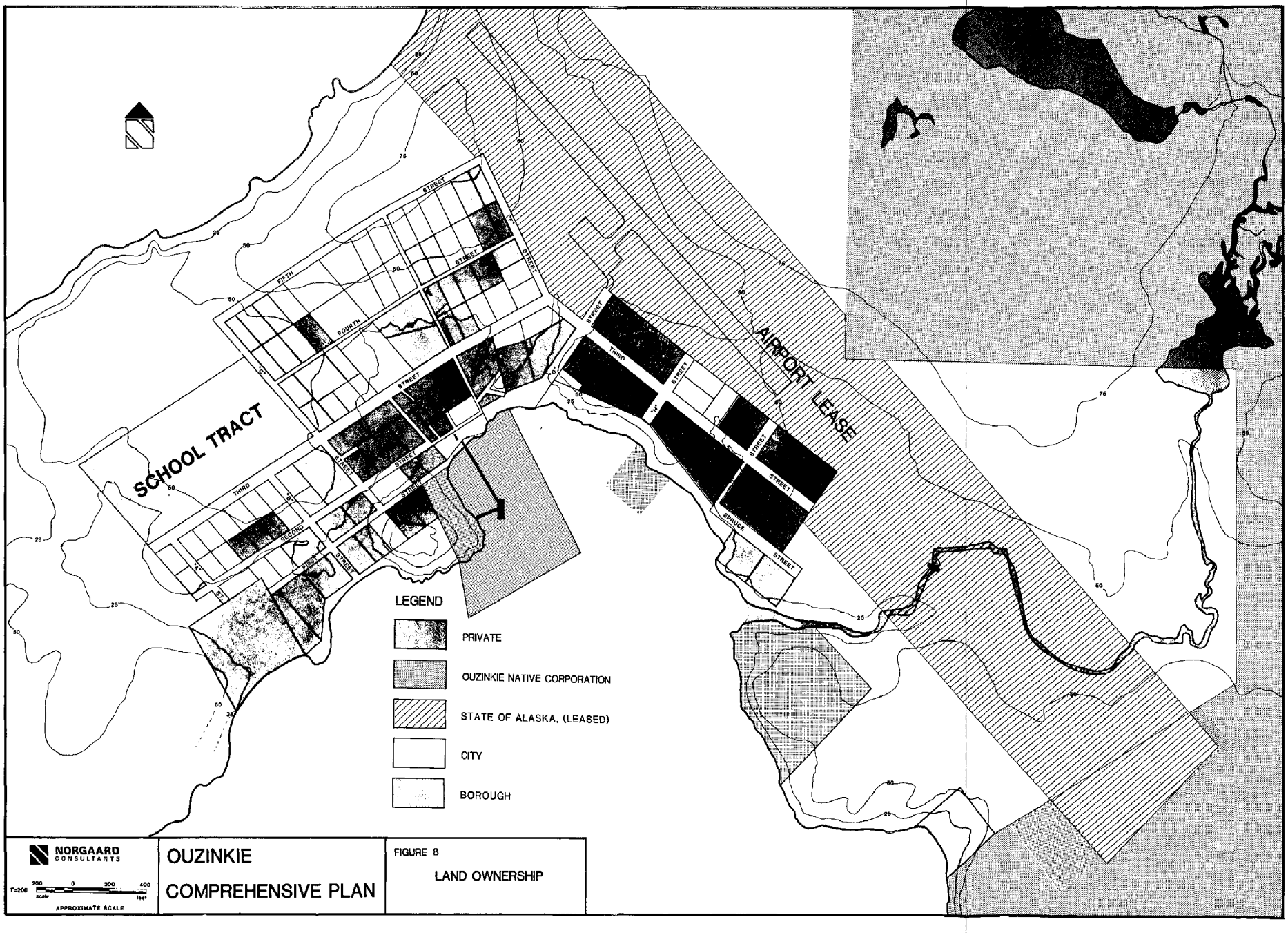
LAND USE

Land use in Ouzinkie revolves around the waterline and the shoreside facilities.

The existing commercial and industrial facilities are clustered around the docking facilities. This central location has provided easy access from both the water and the shore. These facilities, formerly associated with the cannery operation which was burned in 1976, include the dock, fuel tanks, store, Village corporation offices and warehouse. (See Figs. 8 and 9)

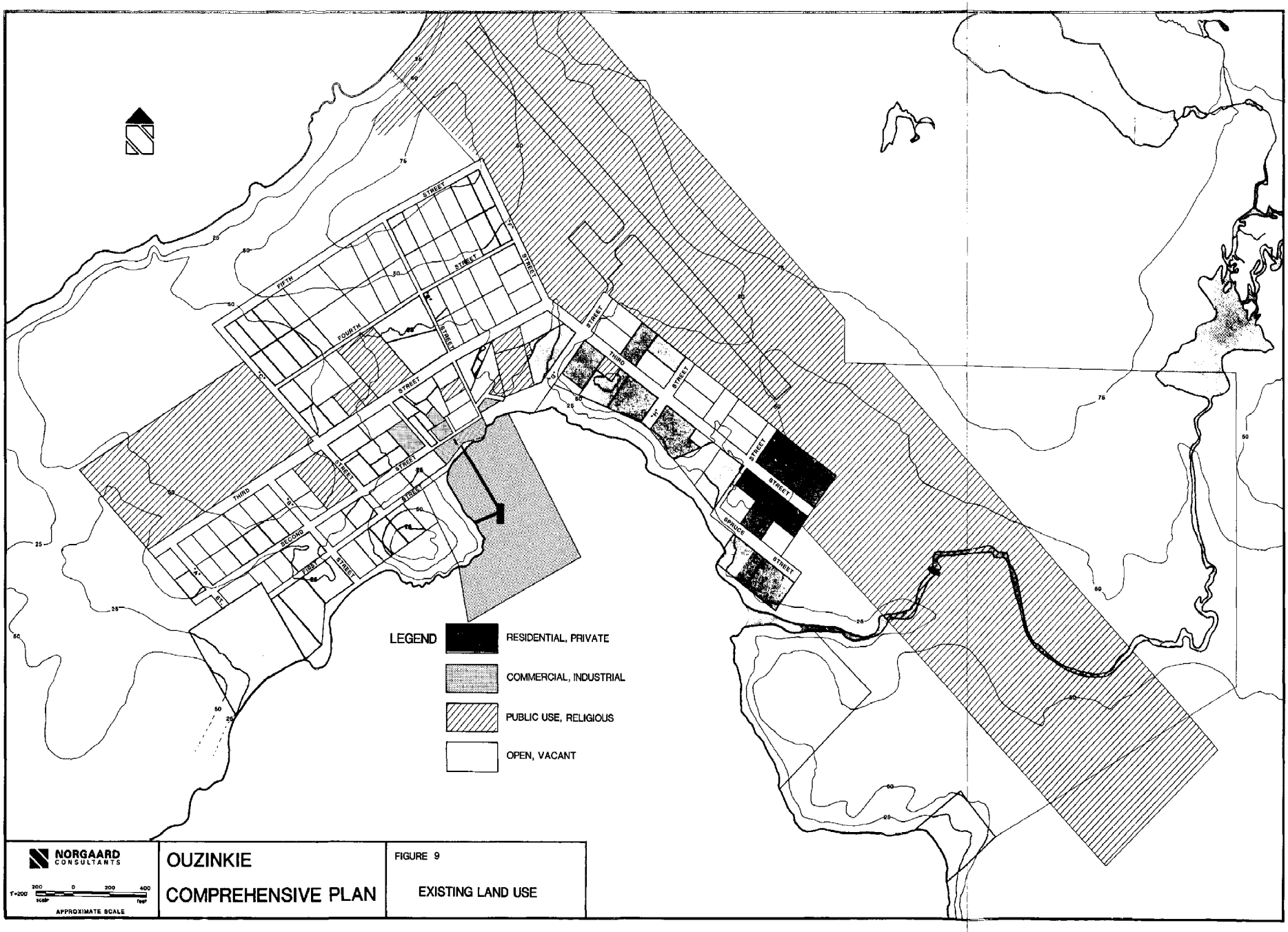
Fanned out around this commercially developed area are the community's residential units. These occupy shoreside land area surrounding and next to the commercial area.

Other land uses include the elementary and high schools, the Alascom earth station, the Baptist Mission and the Russian Orthodox Church. Public land uses include the community and city halls, the water treatment plant and water storage tanks, waste disposal site, the cemetery and a 100 x 2,500-foot runway, which lies just to the northeast of the developed community.



OUZINKIE
COMPREHENSIVE PLAN

FIGURE 8
LAND OWNERSHIP



OUZINKIE

COMPREHENSIVE PLAN

FIGURE 9

EXISTING LAND USE

While development in Ouzinkie is contiguous and not scattered, there is ample room between and behind existing structures for more development.

COMMUNITY FACILITIES

Community Facilities in Ouzinkie include (See Fig. 10):

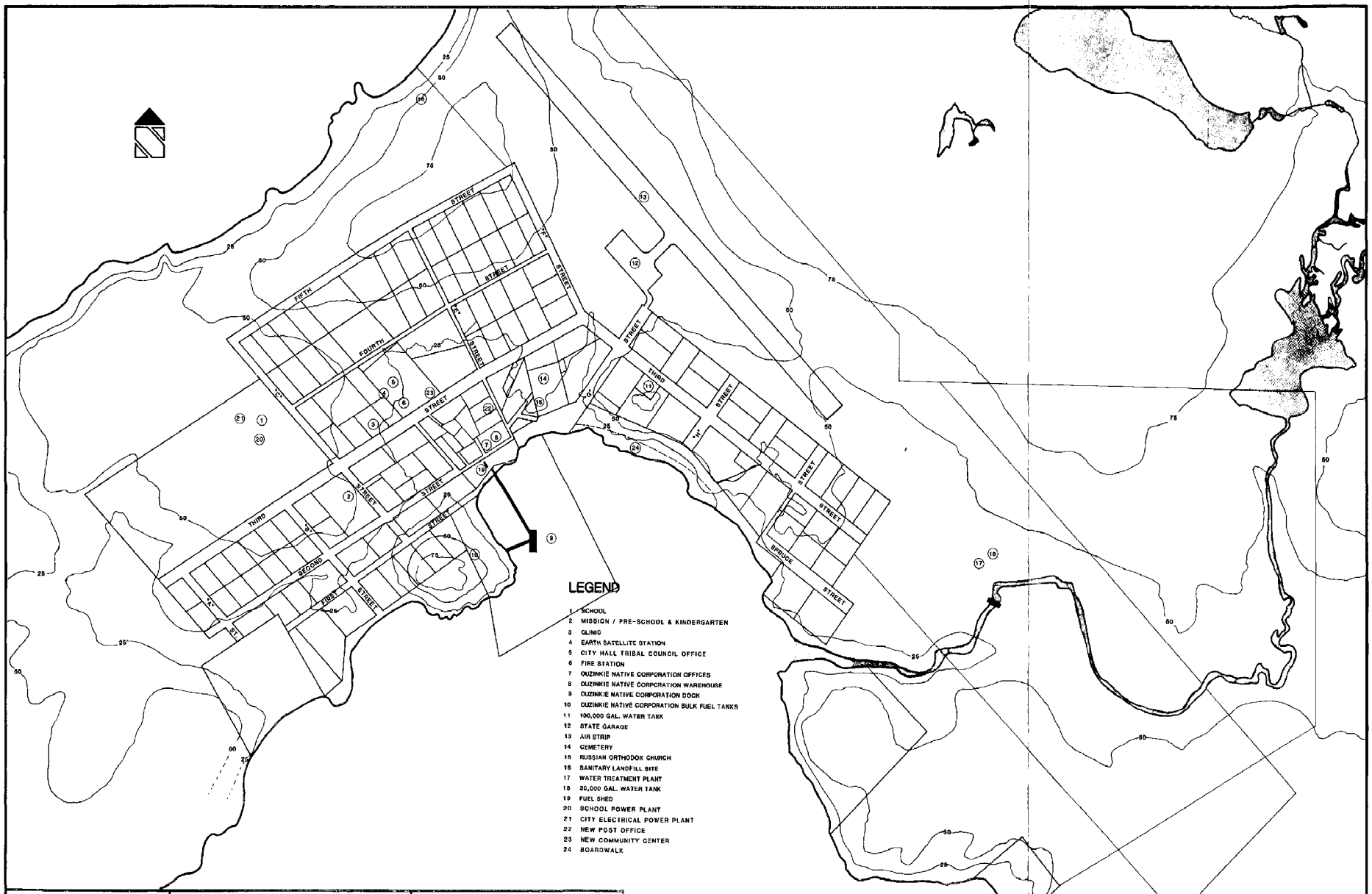
Schools

The Kodiak Island Borough is responsible for the administration of the education system throughout the Borough, including Ouzinkie. Facilities at Ouzinkie include both elementary and secondary classes held in facilities built in 1972 and expanded in 1980. These facilities include a gymnasium, which also is made available for community use. The school has a hot-lunch program as well as vocational-education facilities.

A preschool program is conducted by the Kodiak Area Native Association at the Baptist Mission. The Mission also serves as the site for privately instructed kindergarten classes.

Clinic

A new clinic was built in the residential area between the school and the earth station in



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1"=200' 200 0 200 400 scale feet

APPROXIMATE SCALE

OUZINKIE

COMPREHENSIVE PLAN

FIGURE 10

COMMUNITY FACILITY MAP

1981. This clinic replaces the facility formerly housed at the Baptist Mission.

Staffed by a health aide and a part-time community health representative, the facility has two equipped examination rooms, an infirmary, a waiting room and an office.

City Hall

The City Hall is located just north of the earth station in the old BIA school building. The building serves as the community hall as well, providing space for all functions ranging from hot-lunch programs for the senior citizens to community gatherings.
A multi-purpose community building is scheduled for construction next to the City Hall. This building will provide the facilities for these community functions. A library will be established in the space in City Hall that will be left vacant with construction of the multi-purpose building. The old community hall, now vacant, will be torn down and sold for scrap lumber.

Cemetery

The cemetery lies just north of the Russian Orthodox Church.

Solid Waste Facility

The sanitary landfill is located approximately one-half mile north of the community. The site was developed in 1977 but is poorly maintained due to the lack of appropriate machinery to keep the pit covered. Residents are required to haul their refuse because no municipal pick-up is available.

A new site is needed, and two locations are under consideration. Development of either one will require new road construction.

TRANSPORTATION

There are no connecting roads between Spruce Island and Kodiak Island. Transportation to the City of Ouzinkie is by water and air. Within the community, there are approximately three miles of improved dirt roads, built by the Bureau of Indian Affairs (BIA). However, these roads were not constructed to State Department of Transportation and Public Facility (DOT/PF) standards and, therefore, are not maintained by the State of Alaska. Given the small local budget, these roads have not been maintained and are not likely to be maintained in the near future.

The marine facilities in Ouzinkie are owned by the Ouzinkie Native Corporation. They consist of an `L´-shaped wharf, which is 104 feet long and reaches depths of 28 feet. The wharf allows up to five vessels to offload at a time. Private fishing boats as well as occassional freight charters move people and freight to the island. The Alaska Standard delivers fuel to the community across this facility twice yearly.

The local roads are augmented by boardwalks located at various places within and around the community.

The community is served by a gravel airstrip built by the State of Alaska. The runway is

oriented in a northwest-to-southeast direction and measures 2,500 feet in length. Transient parking space is provided by a small apron, which also houses a DOT/PF garage.

The community is served by air carriers out of Kodiak.

Ouzinkie also is served by float planes that use the 4000 x 1000-foot designated northwest/southeast approach in the harbor area.

Recent studies (Peratrovich and Nottingham, 1982) were conducted to examine possible harbor-protection designs for the Ouzinkie Harbor. The harbor offers protection from all points, except the southeast. Both winds and waves from that direction can, and have, produced severe damage both to vessels and to shoreline property in Ouzinkie. Six options have been designed, providing different configurations and construction techniques, including some finger piers for local fleet moorage. In 1982 dollars, the cost estimates for these various facilities ranged from $2.6- to $3.8-million.

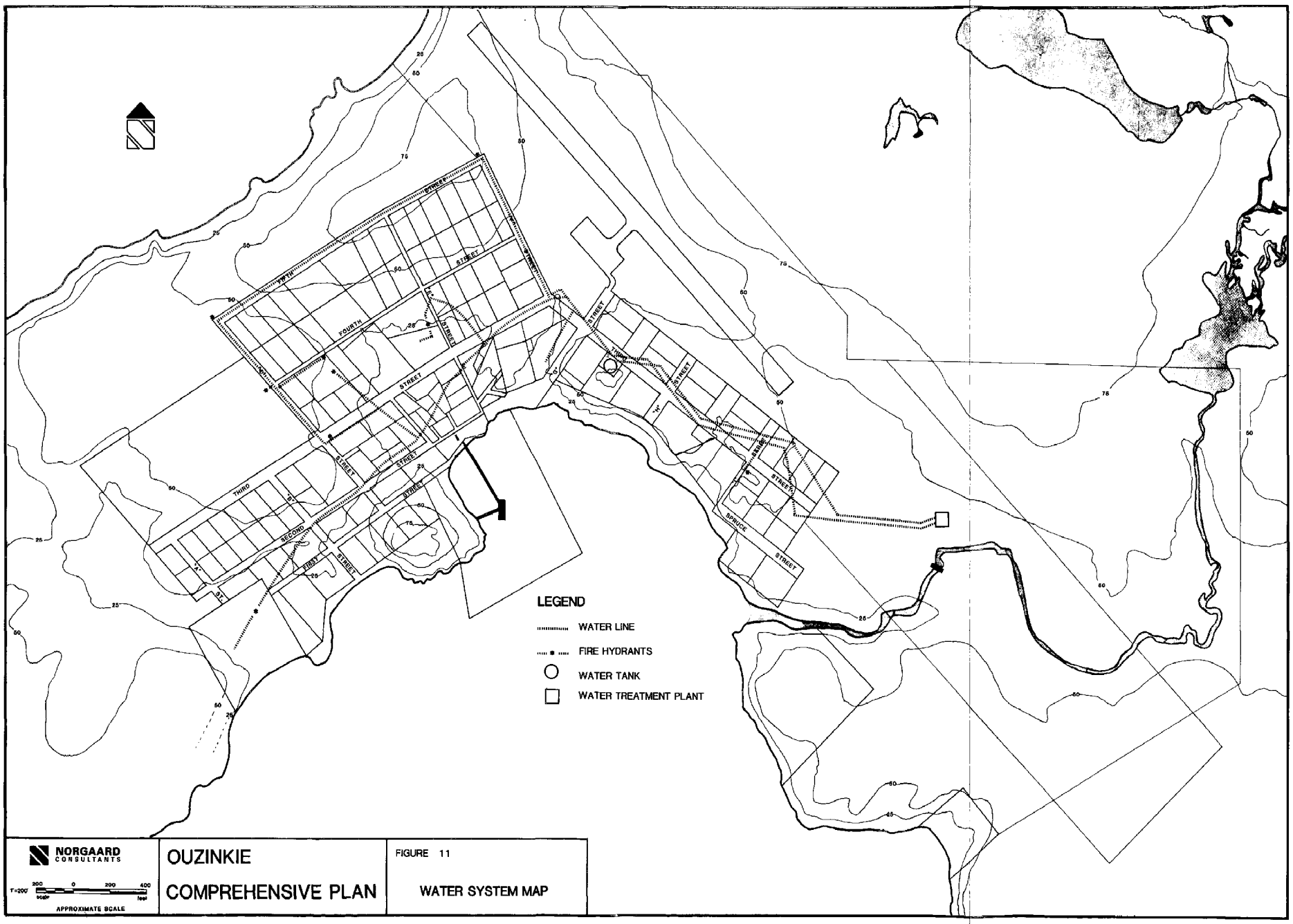
UTILITIES

The water and sewer systems in the community are owned and operated by the City of Ouzinkie. They were constructed by the U.S. Public Health Service in 1966. The water system was upgraded in 1978. (See Figs. 11 and 12)

Water

The water system collects water from Katmai Creek, which lies east of the city. The water is dammed to provide collection. The water is filtered, chlorinated and fluoridated before it is pumped to one of two water-storage tanks. The tank near the treatment plant holds 30,000 gallons, and the tank near the center of the town holds 100,000 gallons. Peak flows have been reported at approximately 50,000 gallons per day (Dowl, 1981).

The water system ties the community users together through 3-inch and 4-inch lines that are installed with fire hydrants. While fire hose is available, the fire hydrant system alone would prove inadequate for fire protection.



NORGAARD CONSULTANTS

1"=200'

200 0 200 400 feet

APPROXIMATE SCALE

OUZINKIE

COMPREHENSIVE PLAN

FIGURE 11

WATER SYSTEM MAP

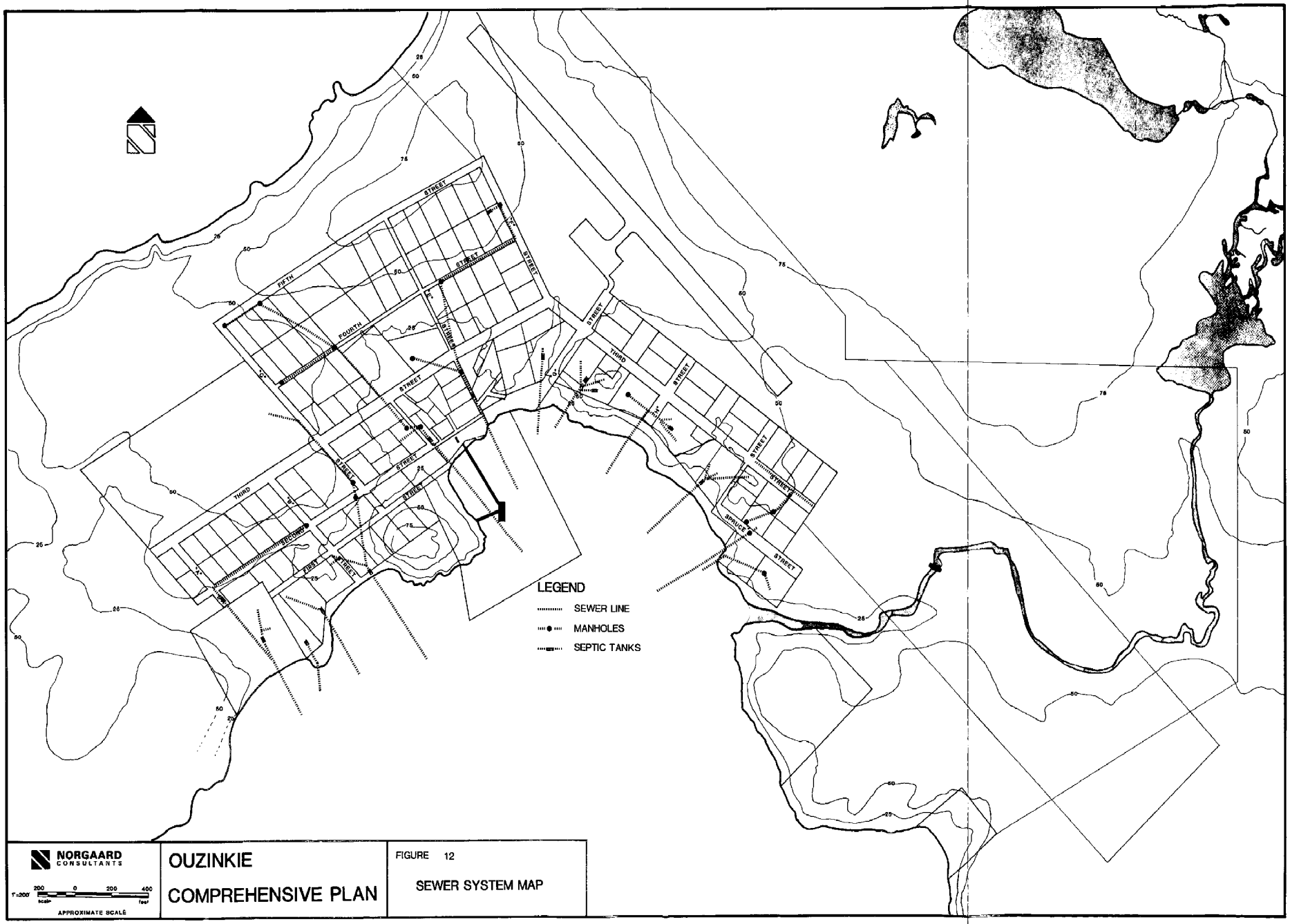
The community also supports a volunteer fire department and is equipped with a 500-gallon pumper. An additional 1000-gallon portable pump tank is available from the public utility and is housed next to the fire engine.

Sewer

The sewer system in Ouzinkie is similar to others constructed by the U.S. Public Health service on Kodiak Island in communities with relatively dispersed housing.

A series of sub-systems was constructed to connect one or more houses together. These subsystems are connected into a larger system with eventual outfall into Narrow Strait. The subsystems consist of collection lines and service connections, septic systems and the outfall. With only a few exceptions, the entire community is connected to this municipally operated system.

The system needs upgrading because lines have buckled and leaks are common. Such a project is planned for 1984, with financial assistance from the Kodiak Island Borough.


LEGEND
SEWER LINE
MANHOLES
SEPTIC TANKS
FIFTH
FOURTH
THIRD
SECOND
FIRST
STREET
SPRUCE
NORGAARD CONSULTANTS
1"=200'
200 0 200 400
scale feet
APPROXIMATE SCALE
OUZINKIE
COMPREHENSIVE PLAN
FIGURE 12
SEWER SYSTEM MAP

Electricity and Fuel

Two 200-kilowatt generators near the school provide the community with electrical service and are operated by the City of Ouzinkie. Meters are installed and users are charged rates according to use.

The school uses waste heat from the generator and also has a 50-kilowatt stand-by generator.

At the time when the economics of central electricity generation in the community is no longer cheaper than alternative systems, some hydro-power potential exists on Katmai Creek, one-half mile east of the community (Dowl, 1981).

Fuel is shipped into the community by Standard Oil and is brought across at the Ouzinkie Native Corporation facilities. The fuel is used for electrical generation and also is sold to individual residents for heating and cooking purposes. Gasoline also is provided in 55-gallon drums, while propane is bought in Kodiak by individual residents and shipped privately.

Earth Station

Alascom has constructed a satellite earth station with telephone and public television transmission and reception dish and local telephone equipment. The dish is located near the city offices.

POPULATION

The 1980 Census data showed a population of 173 people in the City of Ouzinkie. This figure was revised to 233 in light of the most recent (Dec., 1982) Alaska Department of Community and Regionals Affairs (DCRA) census figures utilized for State revenue sharing payments. (See Table 1)

This population has fluctuated in recent years, up form the 1979 Census count of 160 but substantially lower than the historical high of 253 reported during the 1940 Census.

Utilizing information collected in 1980, the Kodiak Area Native Association fixed the median age at 27 years. Average household size is approximately 3.0. Male/female ratios are approximately 60%/40%.

According to the 1980 federal census, the community reports a 94% Native population.

Population figures for the past century for the city are shown in the following table.

TABLE 1

City of Ouzinkie

Population

Date	Population	Source
1880	45	U.S. Bureau of Census
1890	74	" " " "
1920	96	" " " "
1930	168	" " " "
1940	253	" " " "
1950	177	" " " "
1960	214	" " " "
1970	160	" " " "
1980	173	" " " "
1981	177	Alaska DCRA
1982	233	Kodiak Island Borough

Small communities such as Ouzinkie, which depend primarily on a single industry, show dramatic fluxes in population due to the same fluctuation associated with the particular industry. Ouzinkie's population was at its peak during the top salmon years around 1940. The poplulation has grown in recent years as a result of its proximity to Kodiak and the strength of the crab fishery in the late 1970's despite the lack of a commercial processing facility in the community.

Population growth for the community will remain tied to the fishing industry. (See Table 2) The population should remain relatively stable as long as adequate housing

is provided and maintained. Larger growth in the population can be expected in direct proportion to the level of local fisheries development. The construction of a breakwater to provide moorage refuge north of Kodiak Harbor, mooring for a local fleet and a generally improved harbor easily could attract some shore-based operations. The local population would grow accordingly.

Projecting growth for the community, then, is left at the stable growth rate of 1.0-1.5% per annum as experienced during the past three years. Table 2 displays the population projection for Ouzinkie in 5-year increments through the year 2000 based on an annual growth-rate projection of 1.3%.

TABLE 2

City of Ouzinkie

Population Growth Projections

Year	@ 1.3% per annum	@ 2.0% per annum
1982	223	223
1985	228	232
1990	243	256
1995	260	283
2000	277	312

Minimum growth projections for the community suggest a population increase of approximately 30% by the year 2000. Assuming the average household size remains fairly constant at 3.0, this increase would translate into approximately 17 new households.

Existing residential land is sufficient to accommodate such growth, utilizing existing platted parcels first and then expanding inland from these developments as more land is needed. Such expansion will keep additional water and sewer facility expansions at a minimum while supporting the continuation of a centralized core commercial and industrial center focused on the port facilities.

GOALS AND OBJECTIVES

GOALS AND OBJECTIVES

Introduction

The following goals and objectives represent the general desires of the local residents of Ouzinkie for their community in the areas of economy, transportation, housing, land use, recreation and environment. These goals and their associated objectives provide the framework for future community decisions on matters that affect the city, its infrastructure and its future.

All the goals and objectives presented here subordinate themselves to the following primary community goal:

Primary Goal

To upgrade the living environment in the community to allow the provision of a higher level of basic community services and infrastructure, such as housing, community facilities and a strong economic base, without sacrificing the rural character and lifestyle of the community.

Economic Goal

To establish a broader economic base for the community, focused on expanded participation in the fishing industry with shore-based facilities, a strong local fleet and a service industry, which will provide sufficient waterborne and shoreside jobs to ensure the stability and growth of the community.

Objective 1: Actively solicit marine oriented shore-based industries to include but not to be limited to fish processing, both traditional and new, and boat service and repair.

Objective 2: Encourage the development of additional commercial services to be established within the community's commercial center to serve both local residents and the fishing fleets which navigate the waters.

Objective 3: Provide the opportunity for location of fish processing industry facilities along the city's waterline.

Objective 4: Encourage the development of local commercial services to support tourism.

Objective 5: Develop and maintain an adequate infrastructure for local businesses and industry.

Transportation Goal

To improve the transportation system both within the village and to other parts of the Kodiak Island Borough to facilitate a freer flow of goods and people to, from and within the city.

Objective 1: Upgrade and expand the boardwalk system within the city.

Objective 2: Construct a breakwater facility in the harbor with associated mooring facilities for local and transient fishing vessels.

Objective 3: Maintain as a minimum air carrier service, daily flights to and from Kodiak.

Objective 4: Expand existing road network only to include new special purpose roads, e.g., to a new landfill site.

Objective 5: Actively solicit and encourage the development of a mini-freight ferry service to/from Kodiak for both freight and passenger service.

Objective 6: Develop an off/on-loading ramp for barges and other freight carriers.

Objective 7: Develop a fuel delivery system for local island residents.

Objective 8: Discourage increases in vehicular traffic growth within the community.

Housing Goal

To expand and upgrade the existing housing stock to provide adequate housing for the existing households as well as maturing adults who wish to stay in the community.

Objective 1: Establish a house-maintenance and rehabilitation program in cooperation with Kodiak Island Borough, State and Federal programs for local home owners.

Objective 2: Encourage the construction of new houses by private parties as well as housing programs.

Objective 3: Maintain and expand the city's utility system as necessary to provide services to new housing development.

Objective 4: Provide for a mix of housing available to local residents as determined by local needs and lifestyle.

Land Use Goal

To maintain existing land uses within the community, the low-intensity use outside of the harbor commercial and industrial area and to prevent incompatible uses from encroaching on each other.

Objective 1: Survey, plat and make lots available for new housing development as well as for new public works projects such as the landfill site.

Objective 2: Restrict future residential development to areas contiguous with existing development, with immediate development to the north of existing housing.

Objective 3: Restrict future commercial and industrial development to areas contiguous with existing development in the harbor area.

Objective 4: Provide ample land for expanded commercial development within the existing commercial core area near the dock facilities as well as near the airport.

Objective 5: Prohibit any development that would adversely alter present circulation and movement patterns of pedestrians and goods, unless acceptable alternatives can be provided.

Objective 6: Locate and develop a new cemetery site.

Objective 7: Provide for the preservation of adequate open space and adequate access along the shoreline with appropriate land-use designations and integration with a trail system.

Recreational Goal

To provide a wide range of recreational opportunities for all segments of the community.

Objective 1: Establish a parks and recreational program for the city in cooperation with the Kodiak Island Borough.

Objective 2: Establish a trail system to include beach and stream access.

Objective 3: Convert non-buildable lots with the community into natural parks.

Objective 4: Provide for neighborhood child playgrounds in future housing development.

Objective 5: Develop a central outdoor recreation area for use by all ages and by the entire community.

Objective 6: Maintain community access to and use of school facilities for recreational purposes.

Environmental Goal

To ensure the natural environment is protected and enhanced by eliminating existing sources of environmental degradation and prohibiting future actions by private and public entities that might adversely affect the environmental quality of Ouzinkie and its surrounding area.

Objective 1: Implement local erosion control measures to ensure the continued stability of the shoreline beaches and bluffs, including construction of a breakwater facility.

Objective 2: Establish and maintain an adequate community sanitary landfill site.

Objective 3: Prohibit development that does not preserve the natural land forms, existing vegetation and other existing environmental features of the Ouzinkie area to the maximum extent possible.

Objective 4: Except for activities that are water dependent, all beaches and shoreline shall be kept free of permanent development.

Objective 5: Provide for adequate watershed protection for the Katmai Creek system from town to both connected upland lakes.

THE COMPREHENSIVE PLAN

GROWTH REQUIREMENTS

Commercial and Industrial

Existing commercial and industrial property is restricted to the dock and immediate upland area, which is owned by the Ouzinkie Native Corporation. Additional shoreside property is owned by the corporation along the eastern shore of the bay, including the dock ruins of an older cannery complex destroyed by fire.

Future enterprises desired by the community are primarily associated with waterside activities, including processing facilities and fleet support-services and industries. To accommodate these expectations, additional upland acreage needs to be dedicated to industrial and commercial activities.

In addition to water-related commercial ventures, the community will support a limited tourism and sport hunting and fishing industry. Local support businesses will be needed to serve these enterprises although most will be home-based. Besides souvenior and trade shops, eating and lodging enterprises need to be accommodated.

Both the commercial and industrial needs of the community can be served by uplands in the townsite by taking advantage of present or

past processing facility sites and by allowing mixed commercial and residential uses in the core area of the townsite. Such mixed uses have several advantages.

1. All development still is located in a general core area of the community and, thus, provides both the resident and the visitor with convenient access.

2. The historic nature of the community is preserved by allowing the waterside activities to dominate the lifestyle and atmosphere of the central part of the community.

3. By allowing residential use in this commercial and waterfront use area, waterside residential patterns are preserved. This enhances the preservation of the traditional lifestyle of the community while providing for the capability to develop home businesses related to the tourist and sport hunting and fishing industries.

Residential

Residential development pressures will come from two sources in the next 15 years. The first is associated with demand for additional housing through such programs as those offered

in the past by HUD. Houses built under this program replaced substandard housing and made housing available to local families who were living with others.

The second pressure will come from population increases. Not only will maturing young residents who wish to remain in the community contribute to these numbers, but the return of former residents can be expected. People can be expected to return in direct proportion to the availability of jobs and housing. New residents will be dominated by those who have some previous relationship with the community or are directly employed by an expanding commercial or industrial activity.

A housing program scheduled for the near future will utilize most, if not all, of the remaining desirable residential lots. These will be located directly north of existing residential development, subject to relocation of the landfill site. Besides using the remaining infill lots available throughout the community, new residential expansion will have to use areas south of existing residential development along the eastern shore of the bay. A minimum of 17 new households is projected for the next 15 years, in addition to those that will be built in response to housing-program demands.

Utilities

The existing utility plant should be sufficient to meet projected residential and small commercial needs. The two 205-kilowatt generators at the school site are relatively new and appear adequate.

Distribution lines will need to be upgraded and replaced. In addition, new development associated with processing or other large energy consuming activities will require expansion of the city's electrical-generation capability or the construction of self-contained systems in the plants themselves.

Water and sewer development will be needed will all new construction. In addition, upgrading existing lines is needed because the system installed by the Public Health Service has developed leaks and breaks that significantly reduce its efficiency.

School

While the existing school structures should be adequate into the near future, some facility expansion will be necessary to accommodate growth and development of full high school capabilities (as planned for the 1985 school

year). Such expansion needs can be accommodated easily at the existing school reserve site.

Streets

Street construction will be at a minimum. New construction will be necessary for access to a new landfill site, either northeast of the airstrip or south of the existing residential development along the eastern shore of the bay. Street construction in this latter area also will be necessary for access to the breakwater/moorage facility when it is built, as well as to new residential development.

LAND USE ELEMENT

The Ouzinkie Comprehensive Plan provides for four basic land-use classifications to meet the goals and objectives set out earlier in this report.

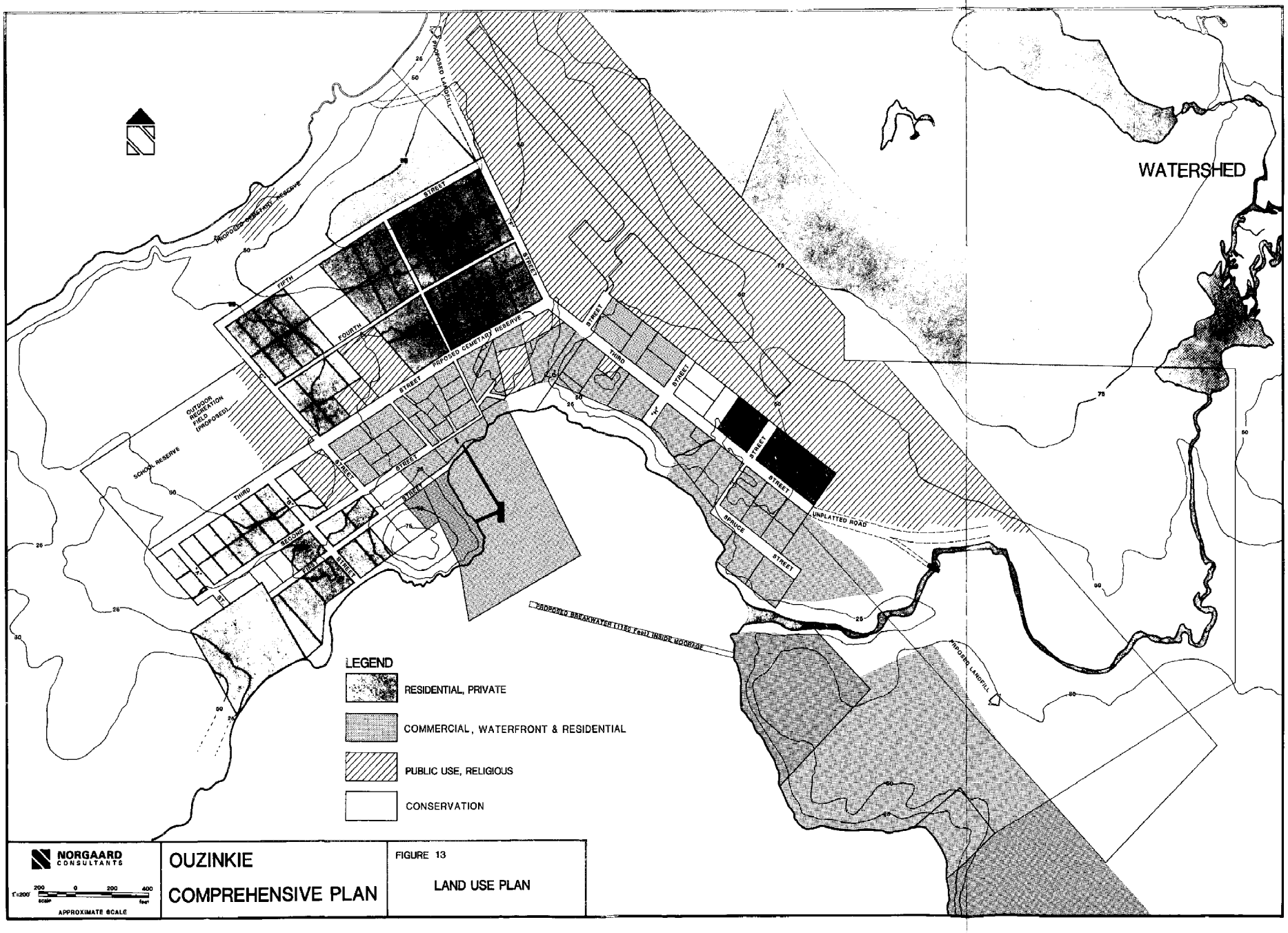
1. Public Use
2. Commercial, Waterfront, and Residential
3. Residential
4. Conservation

These classifications are general guides for future development of the community as well as for maintenance of the basic lifestyle demanded by the residents. Specific zoning ordinances developed by the Kodiak Island Borough in cooperation with Ouzinkie City officials will include the more specific standards for such items as use and development specifications. (See Fig. 13)

Public Use

Acreage set aside for public use, both governmental and religious, is to be held to a minimum and is to be so dedicated for specific public purposes.

Existing public-use areas are concentrated around the central lots holding the city hall,


WATERSHED
PROPOSED LANDFILL
PROPOSED CEMETERY RESERVE
FIFTH
FOURTH
THIRD
SECOND
FIRST
STREET
OUTDOOR RECREATION FIELD (PROPOSED)
SCHOOL RESERVE
SPRUCE
UNPLATTED ROAD
PROPOSED BREAKWATER (1180 Feet) INSIDE WOODAGE
LEGEND
RESIDENTIAL, PRIVATE
COMMERCIAL, WATERFRONT & RESIDENTIAL
PUBLIC USE, RELIGIOUS
CONSERVATION
NORGAARD CONSULTANTS
1"=200'
200 0 200 400
scale feet
APPROXIMATE SCALE
OUZINKIE
COMPREHENSIVE PLAN
FIGURE 13
LAND USE PLAN

the fire station, the earth satellite station and the clinic. This same acreage will hold a soon-to-be-constructed community multi-purpose hall.

Other existing uses include the site of the Russian Orthodox Church and adjacent cemetery and the Baptist Mission.

The water system and the sanitary landfill site also need minimum acreage requirements. While the water system should not need additional acreage during the next 15 years, additional land must be identified for the placement of a new landfill site and for the protection of the community's watershed. Watershed management will be accomplished by dedicating the required acreage as "Open, Undeveloped" as outlined below.

The location of a new landfill site has not yet been determined but will be selected from two alternative locations. The first site is east of the current landfill and would be accessed by extending the current landfill road to the east onto airport leased property. The second siting option is south of the existing housing developed along the eastern shore of the bay. Street extension also would be required to access this location (and for a greater distance than option one).

A new cemetery reserve is located on the northern edge of the community overlooking Marmot Bay.

The State of Alaska will maintain its property rights to the airport tract which will push future development to the south. This is discussed more fully below in the Residential section.

New development is planned for a breakwater of more than 1,000 feet running west from a point on the eastern shore of the bay just south of the mouth of Katmai Creek. This breakwater also will provide moorage facilities on its inner face. This will enhance the local fleet and provide more viability for onshore processing.

Commercial, Waterfront and Residential

Growth in industrial and commercial development in the city limits of Ouzinkie is critical if the community wishes to preserve its viability as a second class community. As outlined in the goals and objectives section, this industrial and commercial development will focus on the establishment of a fish-processing facility onshore in the townsite as well as support industries and services, such as marine ways and repair facilities, supply chandlery and personal services, including eating and lodging. In addition to these fishery related business ventures and industrial developments, residents want to increase local economic

activity by soliciting selected tourist activities and sport hunting and fishing trade.

Tourist trade to be developed includes primarily day visitors form Kodiak on scheduled flights pre-arranged with private Kodiak-based air carriers. The solicitation of sport hunting and fishing trade will provide additional employment to residents to complement existing family incomes. The tourist and the sport hunting and fishing business ventures will be primarily home-based. However, some construction or conversion will be necessary to provide restaurant and lodging facilities in the core townsite district.

The future commercial growth goals and objectives of Ouzinkie, combined with the local desire to preserve the existing character of the community as much as possible, dictates the development of a combined use district in the core townsite district.

For this reason, a combined use district of Commercial, Waterfront and Residential use has been adopted. This CWR District provides for setting aside of core acreage in the community for commercial and industrial development, but not to the exclusion of other waterfront and residential uses.

As adopted by this plan, this CWR District

encompasses those shoreside lots from the Ouzinkie Native Corporation dock and fuel tank farm east and south to a point below the shoreside location of the proposed breakwater project. Upland lots associated with this district reach Third Street to the north and to the east. Additional upland area is included immediately to the south and the west of the airstrip access road to the east of Third Street to all commercial development related to both the airstrip and to the dock and waterside.

Residential

The balance of existing townsite lots, with the exception of those unsuitable for development because of drainage problems, are included in the Residential District. This district should emphasize residential uses, but still allow non-conflicting uses, such as government, churches, health services and neighborhood parks . While multi-family dwellings are considered compatible with the primary use, any development larger than two living units should be reviewed by the City Council.

Additional residential expansion will be to the south and west of the airport tract along extensions of Third Street and Spruce Street. This expansion will coincide with the

completion of new housing units now being planned with HUD funds. These units will utilize remaining lots within the original townsite.

Conservation

The last major land-use designation is the Conservation District, which involves three purposes.

1. The district will provide protection for critical shoreside areas, which could be damaged from increased erosion caused by human use.

2. Protection is afforded the city's watershed from the mouth of Katmai Creek all the way to source lakes and its drainage system.

3. Space will be provided to develop outdoor park and recreational activities, including playgrounds and trails to the beach, lakes and other undeveloped areas.

The protection of the watershed is critical to the long range future of the community. While the district boundaries are only suggested in this plan, general prudent

management and enforcement of an adequate district is warranted. This district runs from the mouth of Katmai Creek across its entire drainage system upland to source lakes on the hillside.

The local beaches and bluffs also must be protected by application and enforcement of this district's provisions, especially where erosion has or will accelerate deterioration.

4. Outdoor recreation is an essential ingredient to community well-being. A large multi-purpose recreation field is planned for a site near the current school and on the school reserve property. This field will provide for playing field surface for baseball and softball and offer outdoor courts for basketball. In addition, picnic facilities will be provided, as will a children's playground. Neighborhood children's playgrounds will be located in existing housing developments.

In addition to this recreation field, additional acreage and lots have been included in this district to prohibit development of poorly drained areas. A system of trails is planned to provide walking access to

all major points along the borders of the community, to the bluffs and beaches, creeks and lakes.

CAPITAL IMPROVEMENT PLAN

CITY OF OUZINKIE

CAPITAL IMPROVEMENT PROJECTS

Priority	Project	Est. Cost	Year
1	Breakwater/Small Boat Harbor/ Barge Landing	$7,500,000	85/86
2	Electrification Distribution Line	$200,000	85/86
3	Sanitary Landfill Site and Incinerator	$1,000,000	85/86
4	Water/Sewer Rennovations	$2,000,000	86/87
5	Erosion Control/Boardwalk	$650,000	86/87
6	Survey and Plat Additional Municipal Property	$150,000	87/88
7	Develop Outdoor Recreation Areas	$100,000	87/88
8	Develop Local Trail System	$25,000	88/89
9	Micro-Hydro Project	$2,500,000	88/89

CAPITAL IMPROVEMENT PROJECTS NARRATIVE

Priority No. 1: Breakwater/Small Boat Harbor/Barge Landing

Three major needs of the City of Ouzinkie are designed to be met with the proposed breakwater and moorage/landing facility. The breakwater will provide much-needed protection for the coastal bluffs and shoreline in the Ouzinkie Harbor area. These erosion hazards have been well documented, with a range of alternative solutions proposed (Tetra Tech for Alaska DOT/PF, 1982). Of critical importance to long-term control of the coastal erosion hazard are the construction and maintenance of a breakwater facility.

The breakwater facility itself can be utilized as the community's principal structure in a small boat harbor facility. The local fleet has no permanent place to dock, except for transient moorage at the Ouzinkie Corporation Dock located at the head of the harbor area. In addition to the need for local fleet moorage, local economic plans for the re-establishment of fish-processing facilities depend on creation of moorage facilities for the transient fishing fleet.

The breakwater also can serve as the principal structure in a barge and freight on- and offloading facility. Such a facility would be the most cost effective if built as a part of the larger project. The barge loading capability would provide the backbone of a freight system for a community with no road access or air access other than a link via small craft with Kodiak Island. Most freight now must be surface-hauled by boat, yet the community still has not provided adequate onloading or offloading facilities for this purpose. Problems with coastal erosion are worsened, then, by use of beaches for these loading purposes.

The loading facility also would provide the second major infrastructural element needed to attract the fish-processing industry back to Ouzinkie--that is the capability to load products for transshipment with roll on and roll off equipment.

The basic feasibility and conceptual design of such a facility has been developed as alternative 5A within the Ouzinkie Harbor Study (Peratrovich & Nottingham, Inc. for Alaska DOT/PF, 1982). Cost estimates are $7,500,000 for the entire facility, with $3.5 million needed for breakwater construction and $4 million needed for small boat harbor and barge loading facilities.

Priority No. 2: Electrification Distribution Line

The existing electrical distribution system needs repairs and, in many places, replacement. This poor distribution system is partly responsible for the poor efficiency of operation of the generation system. Better efficiency could be realized with repairs.

The distribution system repairs, estimated at $200,000, must be executed before any additional capital improvement projects are executed in the community, such as housing or commercial development. As a result, the immediate and future well-being of the community depends heavily on prompt action on this project.

Priority No. 3: New Sanitary Landfill Site and Incinerator

The City's existing landfill is located north of housing and adjacent to bluffs and beaches along the northwest shore of Spruce Island. This site poses leaching hazards should any additional housing be constructed in the area. Community plans, in fact, call for housing construction in this area. The community does not have the proper equipment to maintain the

landfill at this location, and, even if the proper equipment were available, the facility cannot be maintained at this site due to the likelihood of housing construction.

A new site must be located within one of two areas proposed in the City of Ouzinkie Comprehensive Plan (1984). In addition to site construction, site maintenance equipment is necessary. Cost estimates are $1,000,000, with $800,000 of that allocated toward the purchase of maintenance equipment. These costs can be significantly reduced if construction can be coordinated with U.S. Public Health Service road construction/improvement crews and equipment scheduled for other community work during the summer of 1984.

Priority No. 4: Water/Sewer Renovations

As discussed within the Ouzinkie Comprehensive Plan, existing water and sewer systems need major renovation. Initial installation did not provide adequate underlayment and bedding for the piping. As a result, there is considerable leakage in both water and sewer lines caused by subsequent shifting, settling and uplifting of pipes. A major rennovation project is estimated to cost $2,000,000.

Priority No. 5: Erosion Control

As presented in the **Ouzinkie Erosion Study** (Tetra Tech for Alaska DOT/PF, 1982), coastal erosion of beaches and bluffs in the Ouzinkie Harbor area is significant, and hazard control is essential if severe damage is to be avoided.

Erosion control alternatives are proposed in this document, along with the recommendation for construction of a quarry stone revetment to mitigate toe erosion along the coastline. Also proposed is a slope drainage and revegetation project instituted to stabilize the upper slopes. If such a project is designed and constructed with the complement of a breakwater facility, project costs are estimated at $227,000 in 1982 dollars. These construction costs more than double if executed to necessary design requirements without breakwater construction--$500,000, again in 1982 dollars.

In addition to the revetment construction, the existing boardwalk system along the northeastern shore of the Ouzinkie Harbor area must be reconstructed. Foot traffic still is the primary method of transportation in Ouzinkie, and the beach route still is the shortest between residences and the commercial center for half of the community. Failure to reconstruct the boardwalk system after the

completion of the revetment project would lead to continued upper-bank destabilization as residents continued to use traditional foot traffic routes. Cost estimates for boardwalk reconstruction total $150,000.

Priority No. 6: Survey & Platting of Additional Property

Townsite property in the City of Ouzinkie no longer will support additional development of new housing or public works projects. As a result, additional municipal property must be identified from within surrounding tracts that can be surveyed and platted for new housing as well as municipal projects, such as the new landfill site. Replatting of isolated parcels within the current townsite that pose right-of-way encroachment problems or are the source of property disputes can be provided at the same time. Project cost estimates are $150,000.

Priority No. 7: Outdoor Recreation Areas

Outdoor recreation facilities are as crucial to a community's well being as are water and sewer systems. Within the City of Ouzinkie, two types of outdoor areas need to be developed. The first is a large, centrally located outdoor multi-purpose facility with ballfield, playground equipment for younger children as well as picnic and shelter facilities, including restrooms. The second is the need for two or three smaller neighborhood children's parks and picnic areas to be provided within existing housing areas.

Municipally owned property is available and funds are necessary only for site development, equipment purchase and facility construction. Project costs are estimated at $100,000.

Priority No. 8: Local Trail System

Much of the land around the City of Ouzinkie will remain in its natural state, either as protection for the community's watershed or because the land is not suited for construction or development. Access to these open-use areas, however, provides for other necessary community needs, including recreation. A series of trails is proposed

which would provide foot access to and through such areas, including access to beaches, streams and bluff areas. Project costs for local labor and necessary materials for boardwalk and small bridge construction for the first phase of an on-going project totals $35,000.

Priority No. 9: Micro-Hydro Project

Utilizing the existing diesel-generation system as back-up, construction of a 78-kilowatt hydroelectric plant on Katmai Creek would provide the most economical electricity system for Ouzinkie. The specifics of the project and cost comparisons with other alternatives can be found in the Kodiak Island Borough Electrification Planning Assessment (Northern Technical Services & Fryer Pressley Engineering for the Alaska Power Authority, 1983). Start up costs for this project are approximately $2.5 million.

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