



# Womens Bay

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## Comprehensive Plan Update

*Prepared by:*  
Kodiak Island Borough  
KIB Planning and Zoning Commission

*With:*  
Bechtol Planning & Development  
ASCG Incorporated  
M. R. Stearns Planning + Design LLC

*December 2006*

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## Acronyms

ADEC	Alaska Department of Environmental Conservation
ADES	Alaska Department of Emergency Services
ADFG	Alaska Department of Fish and Game
AKDOL	Alaska Department of Labor
ASCG	ASCG Incorporated
DCED	Department of Community and Economic Development
DNR	Department of Natural Resources
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FGDC	Federal Geographic Data Committee
GIS	Geographic Information System
GPS	Global Positioning System
KIB	Kodiak Island Borough
LBCS	Land Based Classification System
LWCG	Land and Water Conservation Grant
NAICS	North American Industrial Classification System
NFIP	National Flood Insurance Program
NPS/RTCA	National Park Service – Rivers, Trails, and Conservation Assistance
SIC	Standard Industrial Classification
SLUCM	Standard Land Use Coding Manual
USF&WS	United States Fish and Wildlife Service
WB	Womens Bay
WBC	Womens Bay Community
WBCP	Womens Bay Comprehensive Plan

# Chapter 1. Introduction

## History

The Womens Bay community, named for the Bay it overlooks, is located in the lower Russian and Sargent Creek valley on the northeast coast of Kodiak Island. Also known as Bells Flats, the area was extensively used during World War II by the military for national defense. The military placed infrastructure, particularly roads, in the area that still exists today. In the late 1960's the federal government transferred land to the State of Alaska. Some of this land, including the area presently occupied by the Womens Bay community, was subsequently transferred to the KIB. The KIB in turn, instituted a land disposal program, the Municipal Land Entitlement Trust, and transferred parcels not needed for public purpose into private ownership. A memorandum from the KIB Resource Management/Assessing Department, dated April 30, 2003 outlining recent and past land disposal sales is in the Appendix of this plan.

Although the Koniag people were known to be living along the coast in the general vicinity, as evidenced by midden sites at different locations in Womens Bay, none have been found inland in the planning area. However, the area was probably used during this time for hunting, fishing and berry and plant gathering on a seasonal basis.

The Russian explorer Sarichev explored and named Womens Bay (which is a direct English translation of the Russian "Guba Babya") in the late 1700's. The lower Russian Creek valley, probably including portions of the planning area, was occasionally used as a livestock pasture due to its relatively gentle topography. In 1939, a visiting Alaska Game Commission Agent noted that a Mr. Bell (which Bells Flats is named for) lived at the head of English (Womens) Bay with his family and grazed a milk cow and two calves. A 1940's vintage map also notes a grazing lease belonging to the Nixon Dairy containing 997.5 acres below Lake Lee and Lake Phil. This lease probably extended from this point back toward Russian Creek, where the original Nixon Ranch House still stands near the end of Middle Bay Drive.

The advent to World War II brought significant changes to all of Womens Bay, including the planning area. Infrastructure for thousands of military personnel, including barracks, support structures, roads and even piped water and sewer were installed. In the planning area, the extension of present day Sargent Creek Road was called either Sargents Creek Road or Way according to 1940s vintage Navy maps. This route led to a pumphouse which collected water from Sargent Creek via a gallery and pumped drinking water through a 12 inch wood stave pipe to the water system located throughout Bells Flats. The foundations of Navy Seabee Quonset huts are also visible along the extension of Sargent Creek Road.

## General Location

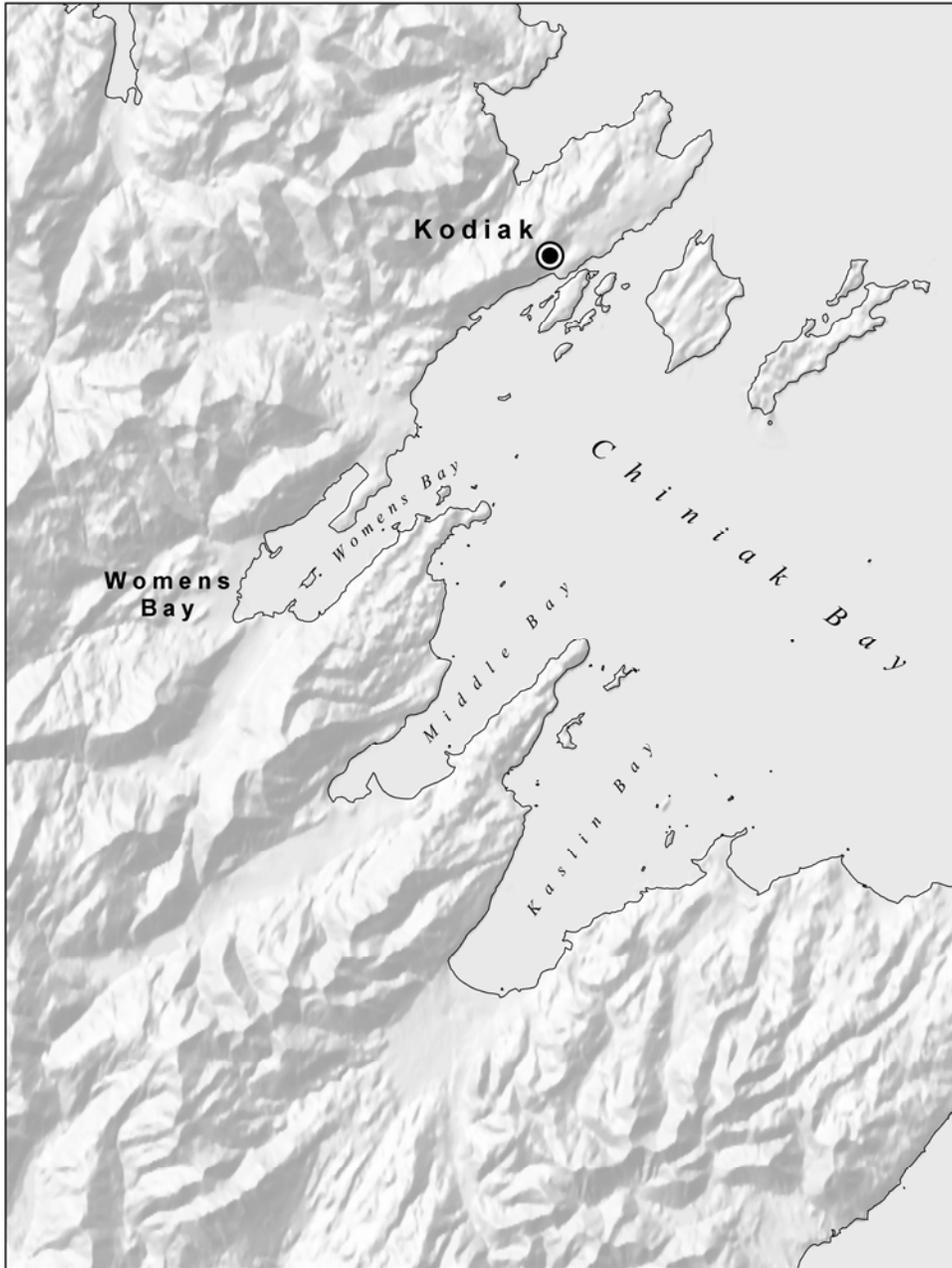
The Core Planning Area includes the community of Womens Bay on the west coast of Kodiak Island, 8 miles south of the City of Kodiak. It lies at approximately 57.693° North Latitude and 152.622° West Longitude and encompasses much of the southern ½ of Sec 29 and Sec 30, most of Sec 31, and the west margin of Sec 32, R 20 W, T 28 S, the SW ¼ of the SW ¼ Sec 36, R 21 W, T 28 S, the northeast ¼ Sec 2 and the north ½ Sec 1, R 21 W, T 29 S.( Seward Meridian) Womens Bay is located in the Kodiak Recording District.

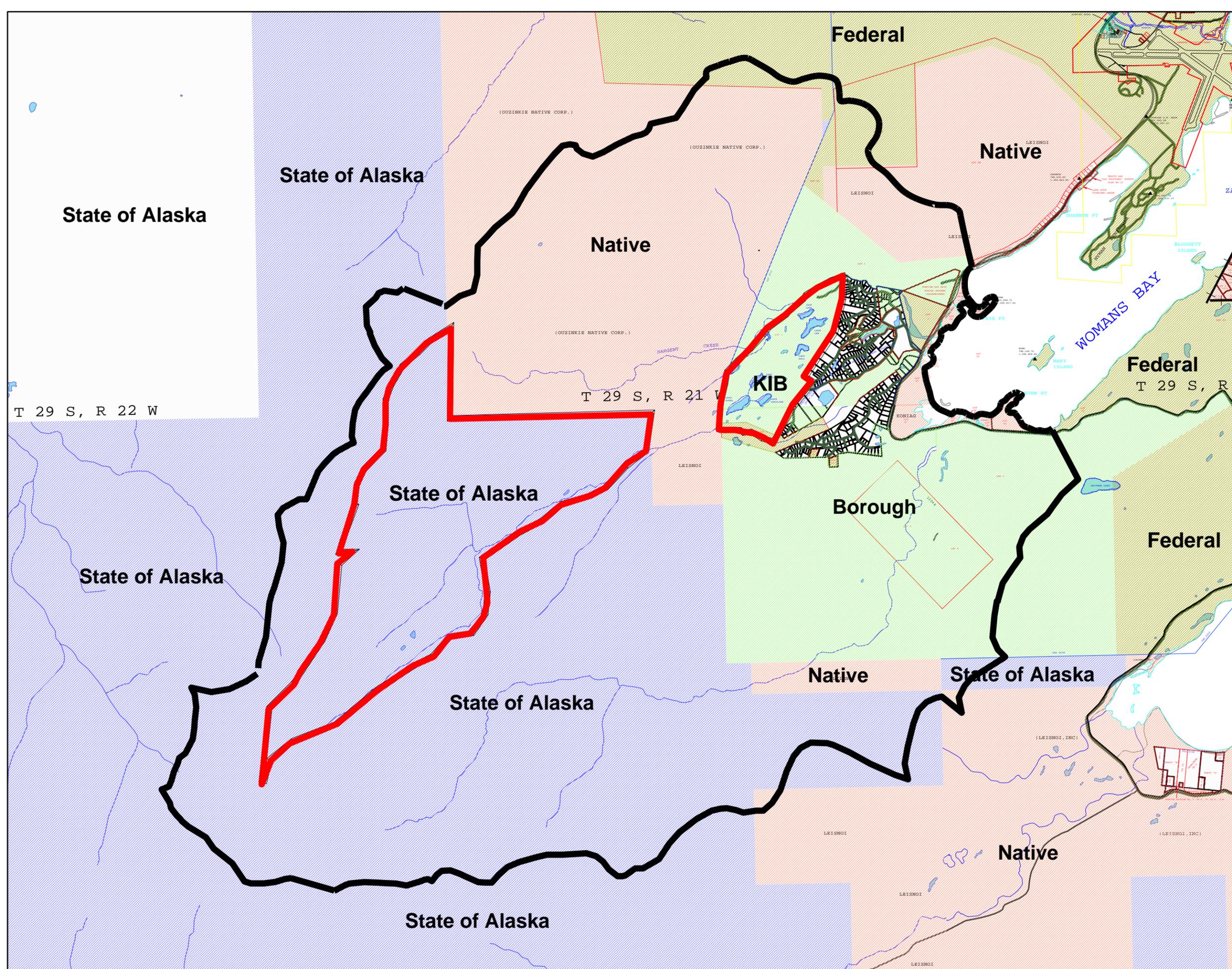
The Core Planning Area for the WBC plan update is shown on Map 2. Approved by the KIB Planning Commission at their October 15, 2003 meeting, this planning area boundary encompasses approximately 2.8 square miles (1792 acres). Within this core planning area approximately 1.2 square miles (783 acres) is private land in five subdivisions.

Russian River Estates	– 11 acres
Russian Creek Subdivision	– 238 acres
Russian Hill Subdivision	– 19 acres
Sargent Cr. Subdivision	– 10 acres
Bells Flats Subdivision	– 505 acres

The boundary of the Regional Planning Area is defined by a series of sharp ridges and peaks which compose the drainage divide for the Russian, Sargent, and Salonie Creek drainages. The greater Regional Planning Area (also shown on Map 2) includes lands and waters of the surrounding watershed and encompasses approximately 53 square miles (34,000 acres). The lands within the Regional Planning Area are owned by the Federal government (820 acres), the State of Alaska (17,177 acres), the KIB (6,693 acres), Koniag, Ouzinkie and Leisnoi native corporations (8,165 acres), and other private landowners in the Core Planning Area (783 acres).

**Map 1. WBC Vicinity Map**





# Womens Bay

- KIB Natural Use Zoning District
- Regional Boundary
- Native** = Land Ownership
- kod\_contour
- roads
  
- Native
- State of Alaska
- KIB
- Federal Gov't

**MAP 2**  
Womens Bay Core  
and Regional  
Planning Area

Map prepared for the Womens Bay Comprehensive Plan Update, Jan. 2005.  
 Alaska Highway System, GPS centerline data,  
 National Highway System, Highways, Roads,  
 Streets. Alaska D.O.T. Sept. 2002  
 Contour information: USGS Digital Elevation Model  
 Kodiak Alaska  
 50 foot interval, Scale 1:63,360  
 Created in ArcGIS 9, NAD 27, State Plane 5  
 Ownership information was taken from the  
 Kodiak Island Borough Public Access Atlas  
 Published March 1997 by the State of Alaska  
 Department of Natural Resources, Division of Land.  
 Kodiak Island Borough  
 Community Development Department

0 2,500 5,000 10,000  
Feet

## Chapter 2. Background Report

### A. Population

The Womens Bay Community population determined by the U.S. Census Bureau (Census) and the Alaska Department of Labor (AKDOL) is based on an area encompassing 43.7 square miles of land.

The population figures are estimated by the AKDOL for the Kodiak area using results from the Census and state certified revenue sharing figures.

**Table 1. Womens Bay Community Population**

<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
620*	843	843	674	746	749	672	662	674	675
<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>				
690*	743**	750**	667**	687**	703**				

\*Actual Census figures

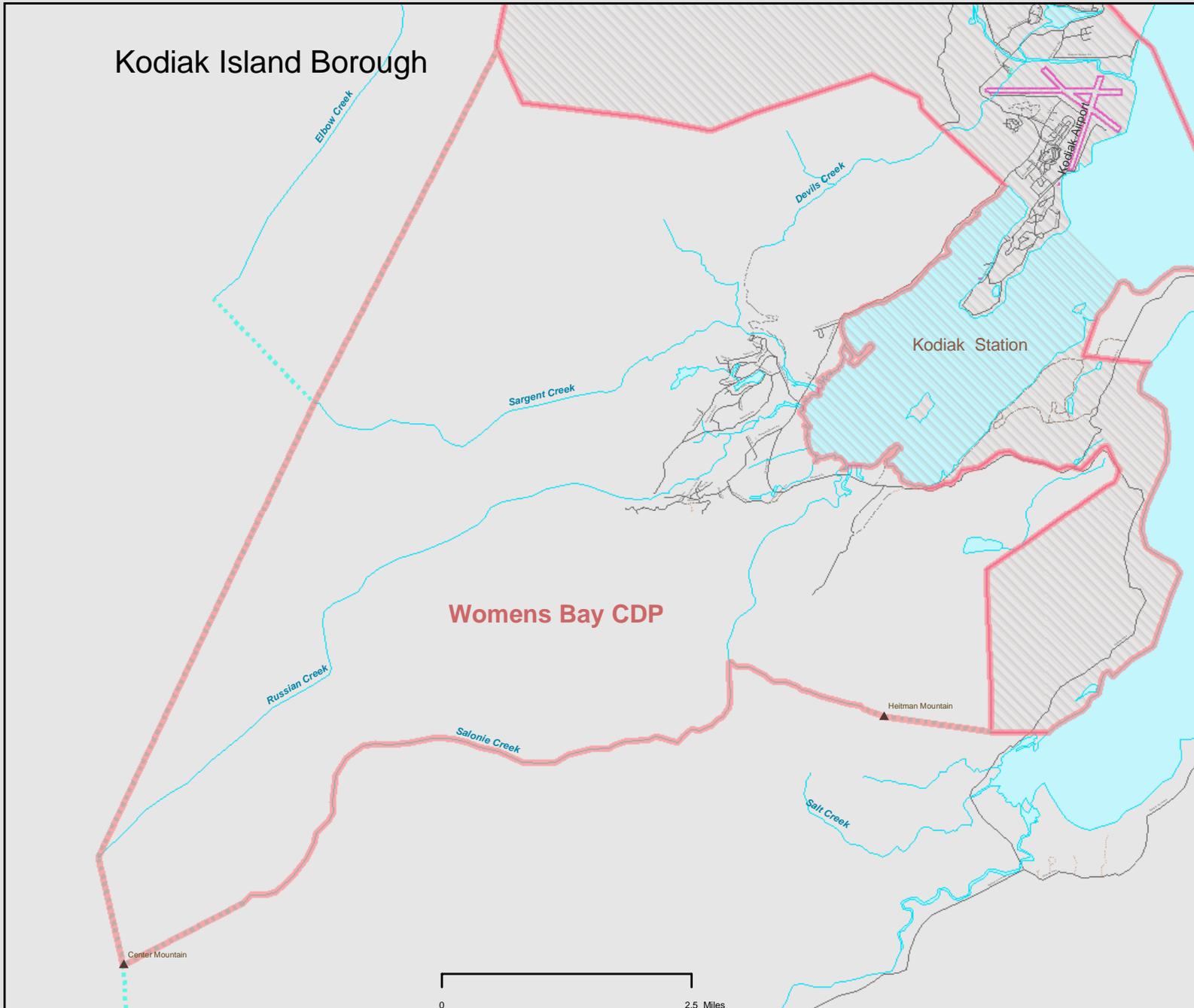
\*\*AKDOL Estimates

Map 7 depicts the Womens Bay Census Designated Place (CDP) map from the Alaska Department of Labor showing the area used by the U.S. Census Bureau and the Department of Labor when calculating population figures for the Womens Bay area. The majority of this population resides within the subdivisions of the Womens Bay core planning area.

The 2000 census population figure for Womens Bay CDP has increased by almost 9% since 1990. However, the population of the Womens Bay Planning Area appear to vary from year to year with a range from 660 – 750 in the past ten years.

# Census 2000 CDPs

## Womens Bay CDP - Kodiak Island Borough



**Legend**

- Neighborhood Roads
- - - Driveway, Private Road
- Airport/Field
- ⋯ NonVisible Pt-to-Pt
- ▭ CDP
- ▨ Military

**MAP 3**  
**AKDOL**  
**Census Map**



Prepared as a special request map  
 June 2004  
 Source: US Census 2000 TIGERline  
 Created in ArcGIS 8 using ArcMap  
 Alaska Albers Projection  
 Alaska Department of Labor &  
 Workforce Development  
 Census & Geographic Information Network

## **B. Cultural Environment**

Womens Bay is an unincorporated area located within the Kodiak Island Borough. Approximately twelve percent of the population is Alaska Native or part Native. Due to its close proximity to the Kodiak Coast Guard Base, many residents are Coast Guard families. A community association, the Womens Bay Community Council, advocates for local concerns. Community roads are maintained by a local service district and the community includes a volunteer fire department with a firehouse and fire suppression equipment. The firehouse also serves as a community meeting center, a voting site, and emergency shelter.

During the 2000 U.S. Census, there were 269 total housing units, and 18 were vacant. Four of these vacant housing units are used only seasonally. Four hundred and twenty five residents were employed. The unemployment rate at that time was 5.43%, although 20.56% of all adults were not in the work force. The median household income was \$72,083, per capita income was \$27,746, and 0% of residents were living below the poverty level.

## **C. Natural Environment**

### **Topography**

The topography of the Womens Bay Regional Planning Area is generally mountainous and rugged. The boundary of the Regional Planning Area is defined by a series of sharp ridges and peaks which compose the drainage divide for the Russian, Sargent, and Salonie Creek drainages. The relief of the regional area is 3366 feet with the highest point the crest of Center Mountain at the southwest end of the area and the lowest point at sea level along the northeast side of the area. The Regional Planning Area contains three northwest trending valleys occupied by Sargent, Russian, and Salonie Creeks. The upper portions of these valleys are steep sided and narrow, but the lower reaches of the valleys are "U" shaped with broad flat floors and low relief rolling topography. The Core Planning Area is located in the lower part of the Sargent and Russian Creek valleys.

The Regional Womens Bay planning area contains various lakes throughout the surrounding hills, which are situated at various altitudes.. Most notable is the Jack and Lee Lakes area, five lakes located between the Russian and Sargent Creek valleys on an upland bench of rolling hills above the northwest margin of the Core Womens Bay Planning Area. These lakes (Jack - 4.7 acres, Lee - 14.3 acres, Aurel - 15.2 acres, Caroline - 6.6 acres, and Cicely - 5.6 acres) are stocked by ADFG with Rainbow Trout and encompassed in the Jack and Lee Lakes Natural Use Area. Numerous small streams are also present in the regional area.

The existing developed areas, within the Bells Flats, Sargent Creek, Russian Creek, and Russian River subdivisions are generally between 15 to 20 feet above sea level to 100 feet in elevation. The Bells Flats and Russian Creek and Russian River subdivisions are bisected by the Russian River and contain steeply rising hills on both sides of the valley floor.

## **Shoreline Characteristics**

The shoreline characteristics of the Womens Bay area can be described as gently sloping and containing sand, pebbles, and gravel and rock materials. The Frye Point area becomes an island at high tide but is connected to the mainland by a natural gravel and sand bar at periods of low tide. The area where Panamaroff Creek enters Womens Bay is a tidal wetland containing eelgrass and other shoreline vegetation. The other areas of the bay are gently sloping and at low tides become completely drained.

## **Geology**

The Womens Bay planning area is underlain by highly deformed Late Cretaceous (100 to 65 million years old) accreted deep marine sedimentary and meta-sedimentary rocks (Kodiak Formation), principally turbidities. Dominant lithologies are dark gray to black shale, slate and phyllite with lesser amounts of interbedded siltstone and greywacke sandstone. These rocks are thin to medium bedded, isoclinally folded, and locally sheared and fractured. Bedding is commonly nearly vertical and over most of the region strikes to the northeast. Because of the sheared and fractured nature of these rocks they are commonly relatively unstable on steep slopes, especially where the slope is parallel to the bedding, and are prone to bedding surface rockslides and block falls. The fine grain nature of the rocks renders them highly impermeable, resulting in low yield of water wells and poor subsurface drainage.

The accreted rocks are intruded by dikes and small plutons of biotite granite and biotite quartz diorite of early Tertiary age (~50-55 million years old). These intrusive bodies are rare in the eastern part of the planning area but become more abundant to the west

The entire planning area was extensively glaciated during the late Pleistocene. Large outlet valley glaciers originating in a regional icecap centered over the interior of Kodiak Island extended down the Russian River and Sargent and Salonie Creeks eroding deep steep-sided U-shaped glacial valleys that dominate the topography of the regional planning area. At the glacial maximum (~ 20 thousand years ago) these outlet glaciers extended far offshore, but as the ice receded it left a discontinuous blanket of clay rich till (ground moraine), and on the valley walls a series of small recessional moraines. Because of its high clay content the till has very low permeability and thus is in general poorly drained.

As the glaciers receded into the island's interior cobble and boulder outwash was deposited along the lower margins and on the floors of the lower reaches of the Sargent Creek, Russian River, and Salonie Creek valleys. Following deglaciation additional course fluvial cobbles and gravels were deposited over the outwash. In the lower parts of the Russian, Sargent, and Salonie Creek valleys these glacio-fluvial and fluvial gravels are from 10 to more than 100 feet thick. They constitute a significant economic gravel resource. These glaciofluvial and fluvial valley fills are highly permeable and contain the major ground water aquifer in the planning area.

Following deglaciation about 14 thousand years ago, the regional planning area has been repeatedly blanketed by thin layers of air fall volcanic ash from the Alaska Peninsula volcanoes. The thickest and most recent of these is the 1912 Katami ash, which locally is as much as several feet thick. These volcanic ashes are generally very fine grained and clay rich. Except in the valley bottoms where thick fluvial sediments are present, the volcanic ashes constitute the principal component of the local soils. The ash-rich soils range from less than a foot thick on steeper slopes to as much as 6 to 8 feet thick on flat terrain. The ash-rich soils are moderately permeable and in most places where they overlay impermeable rock or till they form perched aquifers which are commonly poorly drained. Except in the valley bottoms these sediments provide the only site for leach fields for septic systems. These perched aquifers contribute to the high incidence of failed septic systems in the planning area. When disturbed, the ash-rich soils are highly erodible.

Thin sandy and silty marine and beach sediments and fine-grained organic rich marsh sediments are present along the margins of Womens Bay. Low-lying sand and gravel delta sediments occur at the mouths of the Russian River, extending approximately ½ mile upstream, Sargent Creek, extending about ¼ mile upstream and Salonie Creek. These sediments are highly erodible, compressible, and have low bearing capacity.

Geologic hazards in the planning area include a very high seismic potential common to the northeastern Kodiak region. No active faults have been verified in the regional planning area but several potential active faults have been identified. One of these extends up the Sargent Creek and upper Russian River valleys from Old Womens Mountain and another traverses the western part of the planning area from Mount Erskine to Center Mountain. A seismically induced liquefaction potential is present in fine-grained near-shore sediment marginal to the bay. A high tsunami inundation and moderate subsidence potential exists in low-lying areas along the margin of Womens Bay and in the lower-most parts of the Russian River, Sargent and Salonie Creek valleys.

Significant flood hazards are present in the Russian, Sargent, and Salonie Creek valley bottoms and locally along some reaches of tributary streams. Locally severe erosion potential associated with the highly erodible ash-rich soils is present on slopes throughout the regional planning area, especially where the vegetation covering the soils is disturbed. In places where runoff from soil erosion or excavation sites reached streams, it constitutes a surface water siltation hazard. Bank erosion hazards are high along the lower reaches of the Russian River and some sections of the lower reaches of Sargent and Salonie Creeks. Snow avalanches are common on steep slopes at higher elevations. Landslide potential is moderate to high on steeper slopes and where large over-steepened cut slopes are excavated. The shallow perched aquifers locally represent a significant potential for shallow ground water contamination, especially where septic systems introduce sewage into thin poorly drained soils situated on impermeable till or rock.

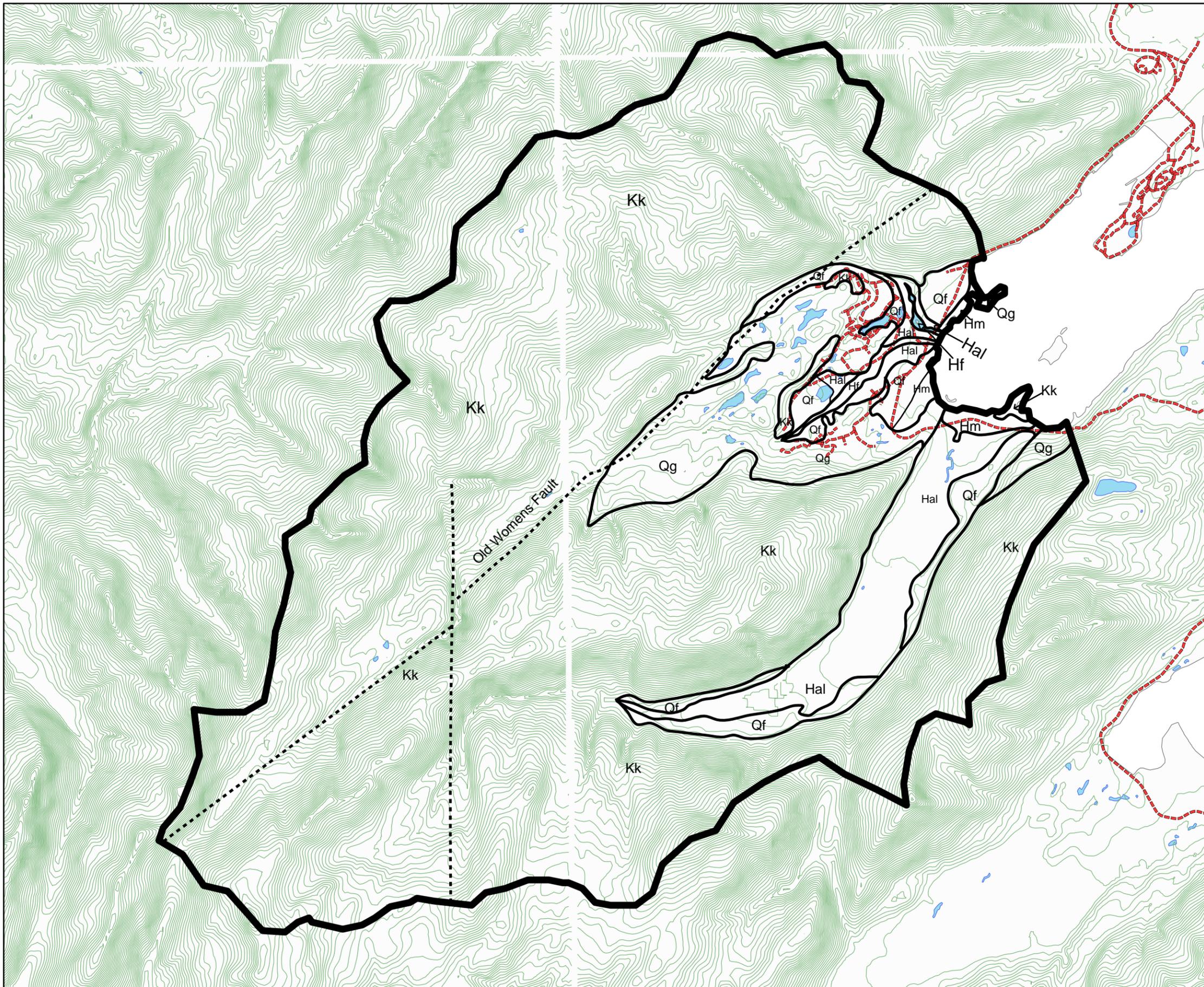
Except for tsunami hazards, no geologic hazard mapping has been done in the planning area. The preparation of geologic hazard maps for the core part of the planning area is greatly needed.

Map 4 depicts the geology of the Womens Bay Community. The following describes the different types of geological formations shown on the map.

# Womens Bay

## Geology

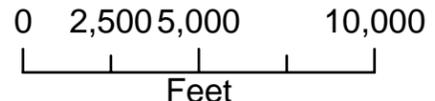
-  roads
-  Regional Boundary
- Hf - Late Holocene fluvial gravel
- Hm - Late Holocene marsh sediments
- Hal - Holocene alluvium
- Qf - Late Quaternary glaciofluvial and fluvial gravel
- Qg - Till, glacial scoured bedrock
- Kk - Kodiak formation
-  Fault lines



MAP 4  
Womens Bay  
Geology



Map prepared for the Womens Bay Comprehensive Plan Update, Jan. 2005.  
G. A. Carver, 2004, (personal communication) and Moore, G. W., 1967, Preliminary Geologic Map of Kodiak Island and Vicinity, Alaska. U. S. Geological Survey Open File Report, 271, scale 1:250,000.  
Contour information: USGS Digital Elevation Model Kodiak, Alaska  
50 foot intervals, Scale is 1:63,360  
Created in ArcGIS 9, NAD 27, State Plane 5  
Kodiak Island Borough  
Community Development Department



0 2,500 5,000 10,000  
Feet

## **Soils**

Although a report of a formal soil survey of northeastern Kodiak Island was published by the United States Soil Conservation Service in 1960, the survey did not include most of the Womens Bay planning area. However, soils in the planning area are in general similar to those in adjacent parts of the island with similar topography, geology, and climate. In general, soils in the planning area can be divided into two groups: 1) upland soils in the mountainous portions of the area, and 2) soils at low elevations on flat or gently sloping ground in the lower parts of Sargent, Russian, and Salonie Creek valleys

The upland soils are commonly thin, ranging from a few inches to a few feet thick. These soils have silt loam and sandy silt loam textures. On steep slopes the soils are mixed and commonly contain abundant pebbles and cobbles derived from the underlying rock. On gentle sloping or flat ground the upland soil is commonly stratified with sandy and silty volcanic ash layers up to several inches thick inter-layered with the silt loam. The upland soils are moderate to well drained and highly erosive where the vegetation cover is disturbed.

The lowland soils in the planning area are predominately silt loams that range between two and five feet thick. These soils also contain layers of volcanic ash up to several inches thick. The soils are strongly acidic (Ph 4.7 to 5.4) and have low to moderate natural nutrient values. The lowland soils are poorly to moderately drained and where the vegetation cover is disturbed they are readily eroded.

## **Climate**

Kodiak Island is located in the Maritime Climatic Zone, which is characterized as having cool summers and mild winters. The Womens Bay area receives an average annual precipitation of fifty inches and this includes seventy-five inches of snow. The average wind speed is from the Northwest at 8.7 knots per hour. Kodiak has an annual rate of 8860 degree heating days and 1575 growing degree-days with 148 average annual frost free days.

The prevailing wind for the Womens Bay area is West/Northwest, which brings moist air from the ocean, and is especially prevalent during the fall and spring seasons and occasionally during the summer months. In the winter, Northwesterly winds bring cold-dry air into this Kodiak area while Southeasterly and Southwesterly wind bring warmer, moister air to the area. Westerly winds, occurring predominantly in the summer months, bring clear weather. The wind velocity for Kodiak has been recorded on occasion to be as high as eighty miles per hour or more.

## **Vegetation**

The types of vegetation found in the Womens Bay area range from eelgrass located in the wetland areas along the shoreline to hardier grasses, which dominate the dryer, lowland areas and surrounding hillsides. Cottonwood trees and Alders are also prevalent in the lowland areas, particularly along the drainage systems of the area. A

few Sitka Spruce are also found in the area but these trees are more often found on the Northeastern shores of Kodiak Island. The predominant types of vegetation found in the developed areas of Womens Bay are deciduous Cottonwood, Alder and Black Birch trees along with low-lying shrubs.

### **Wetlands Descriptions**

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered in shallow water. For purposes of this classification, wetlands must have one or more of the following attributes: (1) at least periodically, the land supports predominantly hydrophytes, (2) the substrate is predominantly undrained hydric soil, and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Map 5 depicts the types of wetlands and uplands found in the Womens Bay Community. The wetlands information was taken from the National Wetlands Survey compiled by the United States Fish & Wildlife (Updated 2003).

The following is a description of each of the wetland types found on the map, as well as definitions provided by the National Wetlands Survey.

**Estuarine System:** Consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land.

Subsystems:           Subtidal -The substrate is continuously submerged.  
                              Intertidal -The substrate is exposed and flooded by tides.

Classes:                Rock Bottom, Unconsolidated Bottom, Aquatic Bed, Reef, Streambed, Rocky Shore, Unconsolidated Shore, Emergent, Wetland, Scrub-Shrub Wetland, Forested Wetland.

**Riverine System:** Includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean derived salts in excess of 0.5%

Subsystems:           Tidal - the gradient is low and water velocity fluctuates under tidal influence. Oxygen deficits may sometimes occur and the floodplain is typically well developed.

                              Lower Perennial - The gradient is low and water velocity is slow. There is no tidal influence, and some water flow throughout the year. The substrate consists mainly of sand and mud, oxygen deficits may sometimes occur, and the floodplain is well developed.

                              Upper Perennial - the gradient is high and water velocity is fast.

There is no tidal influence and some water flows throughout the year. The substrate consists of rock, cobbles, or gravel with occasional patches of sand. Oxygen concentration is normally near saturation, and there is very little floodplain development.

Intermittent -In this subsystem, the channel contains flowing water for only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.

Classes: Rock Bottom, Unconsolidated Bottom, Aquatic Bed, Streambed, Rocky Shore, Unconsolidated Shore, and Emergent Wetland (non persistent).

**Palustrine System:** Includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5%. It also includes wetlands lacking such vegetation but with the following characteristics: (1) area less than 20 acres; (2) active wave formed or bedrock shorelines features lacking; (3) water depth in the deepest part of basin less than 6.6 ft at low water; and (4) salinity due to ocean derived salts less than 0.5%.

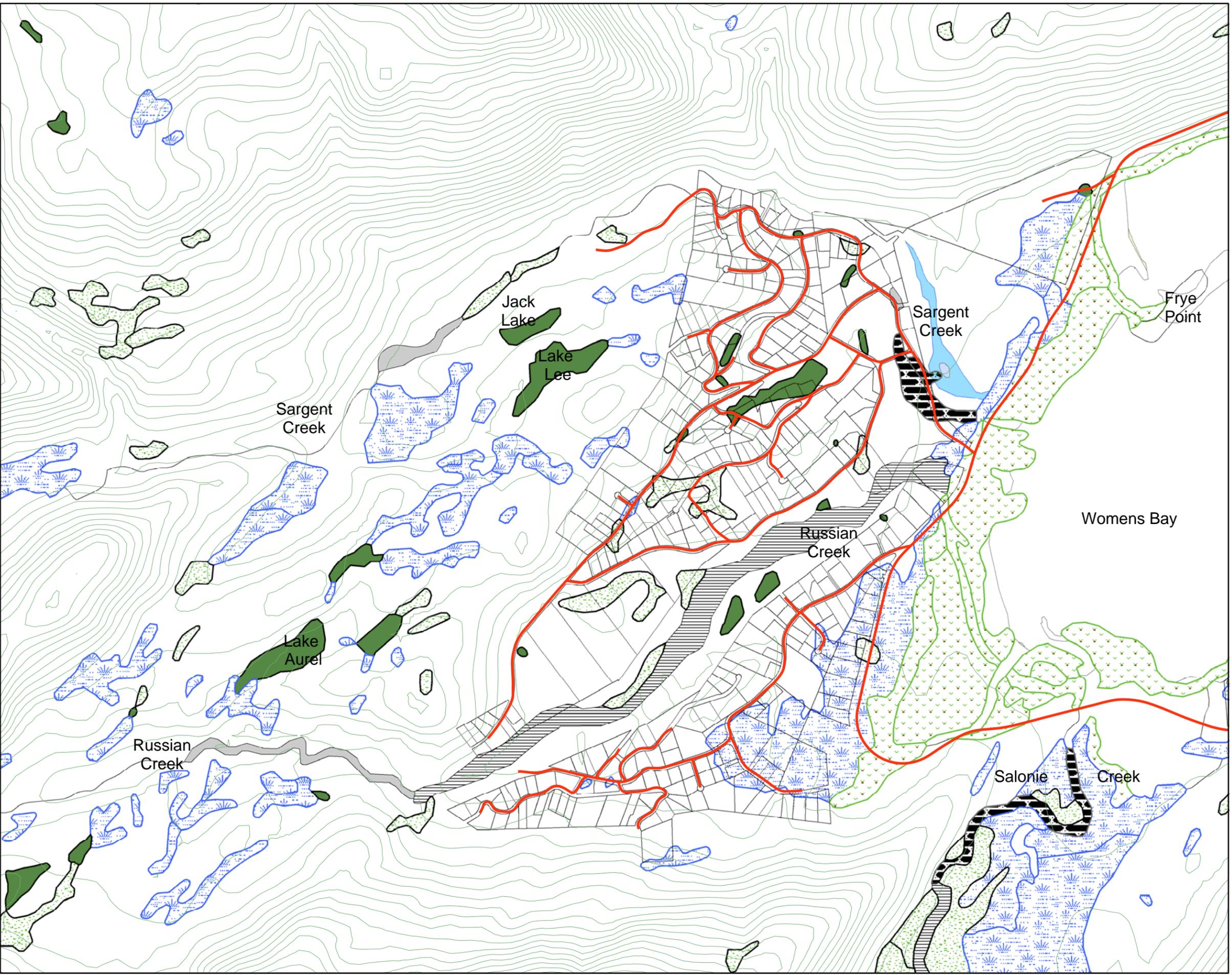
Subsystems: None.

Classes: Rock Bottom, Unconsolidated Bottom, Aquatic Bed, Unconsolidated Shore, Moss-Lichen Wetland, Emergent Wetland, Scrub-Shrub Wetland, and Forested Wetland.

# Womens Bay Wetlands

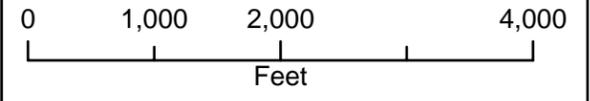
— kod\_contour  
**—** Road

-  ESTUARINE / INTERTIDAL
-  PALUSTRINE / PERSISTENT EMERGENT
-  PALUSTRINE / FORESTED
-  PALUSTRINE / SCRUB SHRUB
-  PALUSTRINE / UNCONSOLIDATED BOTTOM
-  RIVERINE / TIDAL
-  RIVERINE / LOWER PERENNIAL
-  RIVERINE / UPPER PERENNIAL
-  UPLANDS



MAP 5  
 Womens Bay  
 Wetlands

Map prepared for the Womens Bay Comprehensive Plan Update, Jan. 2005. Alaska Highway System, GPS centerline data, National Highway System, Highways, Roads, Streets. Alaska D.O.T. Sept. 2002  
 Wetlands information is taken from the National Wetlands Inventory from US Fish & Wildlife. Last updated 2003  
 Created in ArcGIS 9, NAD 27, State Plane 5  
 Parcel information is taken from selected fields in the current computerized property records in the Assessing Dept. This data has not been reconciled with data contained in manual files which may be more up-to-date.  
 Kodiak Island Borough  
 Community Development Department



## **Fish and Wildlife**

Fish and wildlife are abundant in the Womens Bay area, as is the case throughout the entire Kodiak Archipelago. The types of fish found in the salt water areas of Womens Bay are numerous and include the following species: Pollock, Cod (Pacific and Black), Ocean Perch, Halibut, all types of Salmon, Shrimp, Flounder and Crab (King, Tanner and Dungeness).

Wildlife species found in this area are quite numerous and include Sitka Blacktail Deer, Ptarmigan, fox, weasel, snowshoe hare, land otter, vole, feral rabbit, red squirrel, waterfowl of different species, American Bald Eagles, numerous Seagulls and other birds. Kodiak Brown Bear and Mountain Goat also frequent this area. Womens Bay has also been known to be inhabited by Sea Otters, Sea Lions and an occasional Harbor Seal.

The freshwater fish found in the lakes and rivers in the area include Dolly Varden and Rainbow Trout. During salmon spawning season several species of salmon are known to inhabit the numerous streams and rivers in this area, regardless of how small the water source appears.

Sport fishing and game hunting have always been major activities in this area. This is largely due to the abundant waterways available to the fish and because the area's development has not reached a magnitude which would force the land mammals out of the area. The 1982 WBC Plan documented the existence of beaver lodges in the Lake Orbin area at one time.

Map 6 depicts the Anadromous Water Bodies within the Womens Bay Regional Planning Area. The following is an abstract from the Alaska Department of Fish and Game (ADF&G) describing the source of the data contained in ADF&G's database.

Anadromous streams coverage is derived from the ADF&G's GIS coverage for the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes (referred to as the "Catalog") and the Atlas to the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes (referred to as the "Atlas"). It is produced for general visual reference and to aid users in generating various natural resource analyses and products. The coverage depicts the known anadromous fish bearing streams within Alaska (from the mouth to the known upper extent of species usage). ADF&G updates the anadromous streams coverage regularly. Data for the coverage is current as of the 1998 revision of the Atlas to the Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes and the Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes effective February 6, 1999.

- ADF&G

# Womens Bay

## Anadromous Water Bodies

-  Anadromous Water Bodies
-  Species Spawning Location

-  roads
-  kod\_contour

Species Found within Womens Bay Boundary.

- COHO - Silver Salmon
- CHUM - Dog Salmon
- PINK - Humpy
- Dolly Varden

**MAP 6**  
Womens Bay  
Anadromous  
Water Bodies

Map prepared for the Womens Bay Comprehensive Plan Update, Jan. 2005. Anadromous information was provided by the Alaska Department of Fish & Game. Published 1998.

Alaska Highway System, GPSCenterline data, National Highway System, Highways, Roads, Street., Alaska D.O.T. Sept. 2002

Contour information: USGS Digital Elevation Model Kodiak, Alaska

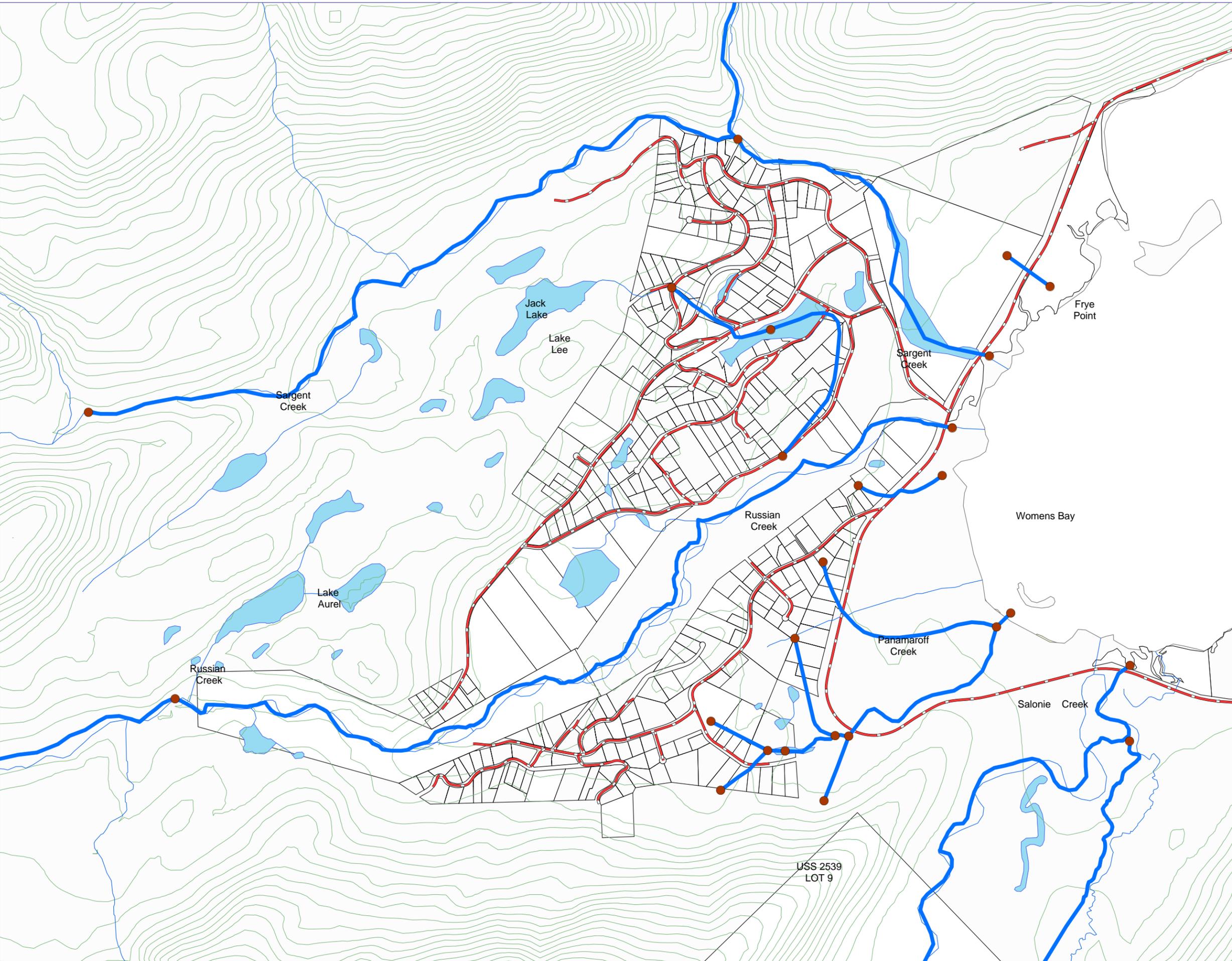
50 foot intervals, Scale is 1: 63,360

Created in ArcGIS 9, NAD 27, State Plane 5

Parcel information is taken from selected fields in the current computerized property records in the Assessing Dept. This data has not been reconciled with data contained in manual files which may be more up-to-date.

Kodiak Island Borough  
Community Development Department

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Feet



## **D. Service Area**

The Bells Flats-Russian Creek Service Area was established in 1975 and encompasses the following area:

Tract A and Tract B of Bells Flats Alaska Subdivision According to plat filed in Kodiak Recorder's Office on June 12, 1969. Plat No.69-4. Serial No.69-684.

Bells Flats Alaska Subdivision According to Plat filed in Kodiak Recorder's Office on June 12, 1969, Plat No. 69-4, Serial No. 69-684.

Russian Creek Alaska Subdivision According to Plat filed in Kodiak Recorder's Office on February 24, 1969, Plat No. 69-1, Serial 69-201.

Alaska State Land Survey 72-11, According to Plat Approved August 18, 1972, Plat No. 72-10, filed in Kodiak Recorder's Office on September 29, 1972.

A parcel of land located adjacent to the Bells Flats Alaska Subdivision, Plat 69-04, filed in the Kodiak Recording Office containing 18.14 acres more or less by KIB Ord. 93-50.

This service area in Womens Bay is referred to as Womens Bay Service Area and includes both the fire service and road service areas. The service area is managed by an elected service area board of members per KIBC 4.50.

The latest Womens Bay Water and Wastewater Facilities Plan was written in 1991. Chapter 5 of the plan regarding future water and wastewater needs and proposals has been added to the Appendix of this document for information purposes.

## **E. Public Facilities**

Most of the homes in the Womens Bay core planning area use individual wells and septic tanks, and are fully plumbed. Electricity is provided by Kodiak Electric Association.

There are no state operated schools located in the community. School-aged children within the community attend the Peterson Elementary School, KIB Middle School and KIB High School. At one time there was an area within the Womens Bay community reserved for a school.

Local hospitals or health clinics include Kodiak Providence Hospital. Auxiliary health care is provided by Kodiak hospitals.

Panamaroff Creek Park is a small neighborhood park with miscellaneous playground equipment and a bus shelter for local children. The neighborhood maintains flowers at the facility. Sargent Creek Park is the Borough land, zoned public use,

adjacent to Womens Bay Firehouse. No developed facilities or plans for park development are identified at this time.

The Womens Bay Firehouse (located on Sargent Creek Road) is used for volunteer training, community meetings and storage of emergency-related equipment. The facility is also considered a primary location for community-type events such as Womens Bay Community Council (WBCC) meetings. Additionally, the Womens Bay Firehouse serves as local emergency services' responder and emergency shelter for the Womens Bay community.

The KIB maintains approximately 4-5 solid waste trash dumpsters at two sites in the community, one along South Sargent Creek Road and the second on Russian Creek road at the entrance to the Womens Bay subdivisions.

During 2004, and with the support of residents of Womens Bay, the KIB Department of Engineering and Facilities investigated a grant to provide a transfer station and recycling center to be located in a central location in the Womens Bay community. To date, the project has not been funded.

## **F. Transportation Access Details**

Womens Bay, accessible by West Rezanof Drive from the northeast and the Chiniak Highway from the east, is 8 miles from Kodiak. Commercial airline services, ferry access, and boat harbors are therefore nearby in Kodiak. Other feasible escape routes in case of an earthquake or tsunami should also be researched and identified.

## **G. Natural Use Areas**

A Natural Use Area (NUA) zoning district, covering both Borough and State land, was established by KIB Ordinance No. 89-05-0 in 1989. In 1997, an effort was undertaken to plan for existing and future land uses on Borough-owned land in the Womens Bay Natural Use Area (WBNUA). A first draft of a planning document titled *Womens Bay Natural Use Area Plan (1997)* was prepared. The stated objective of the draft plan was "to establish uses that were consistent with the intent of the zoning district, which is to protect trails on public land, protect waterways and their banks and discourage development by prohibiting the construction of most structures in this zoning district". (*Womens Bay Natural Use Area Plan, 1997*) The draft plan was never finalized or formally adopted by the KIB.

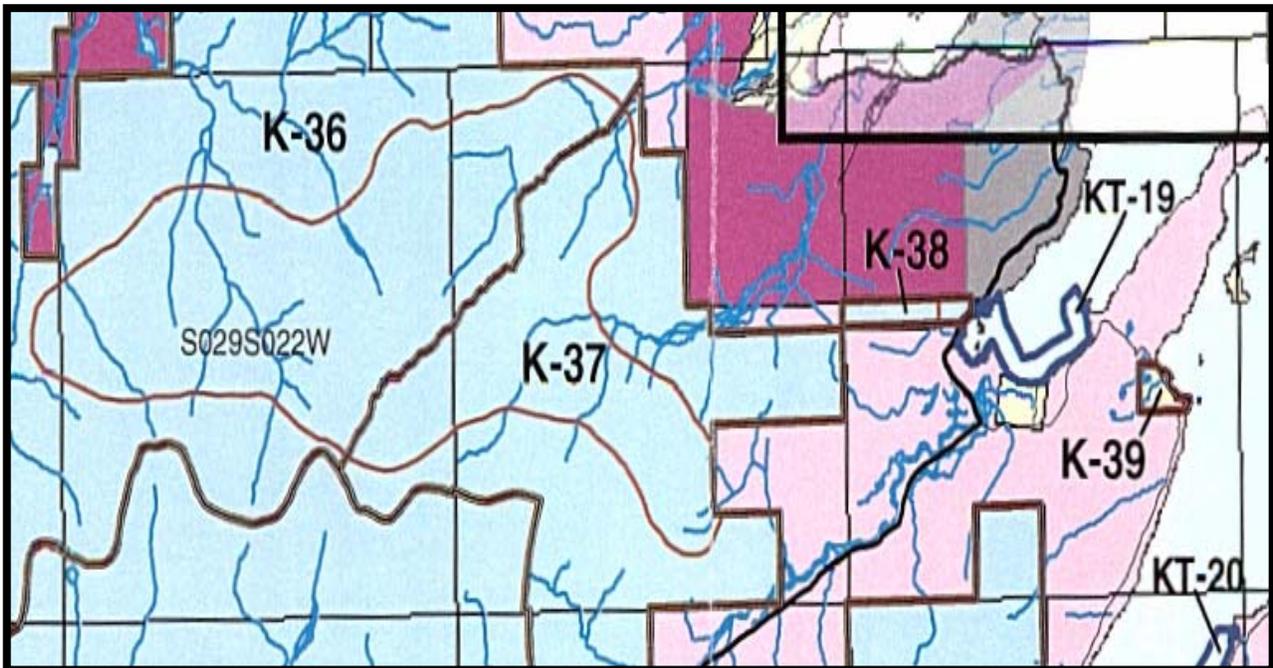
The State of Alaska-owned property within the greater Regional Planning Area that is zoned Natural Use is approximately 4,336 acres. The KIB-owned property within the greater Regional Planning Area boundary that is zoned Natural Use is approximately 726 acres (1.1 Square Miles). Together, the Womens Bay Natural Use Area (hereafter the Jack and Lee Lakes Natural Use Area) totals more than 5000 acres of property that was zoned Natural Use in 1989.

## H. State of Alaska Area Plan

The State of Alaska Department of Natural Resources prepared the Kodiak Area Plan for State Lands Public Review Draft (November 2003) that was adopted on December 20, 2004 by the Commissioner of the Department of Natural Resources (DNR). The plan establishes land use designations, management intent and guidelines for approximately 3.9 million acres of state land within the KIB. The adopted plan consists of the Public Review Draft (November 2003) and the Approved Revisions to the draft found at: <http://www.dnr.state.ak.us/mlw/planning/areaplans/kodiak>. In adopting the plan, the Commissioner has also approved Land Classification Order SC-04-001. The date of issuance of these decisions was January 3, 2005.

The state lands included in the Kodiak Area Plan in the Womens Bay Regional Area are depicted on the following maps as areas K-36, K-37, K-38, K-39 and K-72. The adopted designations for each of the areas are described below.

Map 7. State Area Plan - WBC Area



### State Area Plan Designations

**K-36 Elbow Mountain/Kizhuyak Bay Drainage:** This area has been designated as Dispersed Recreation in its central and eastern parts, essentially coinciding with the area affected by the Natural Use zoning of the KIB. This zoning district limits most forms of development. The remainder of the parcel is designated as General Use, and managed for multiple uses.

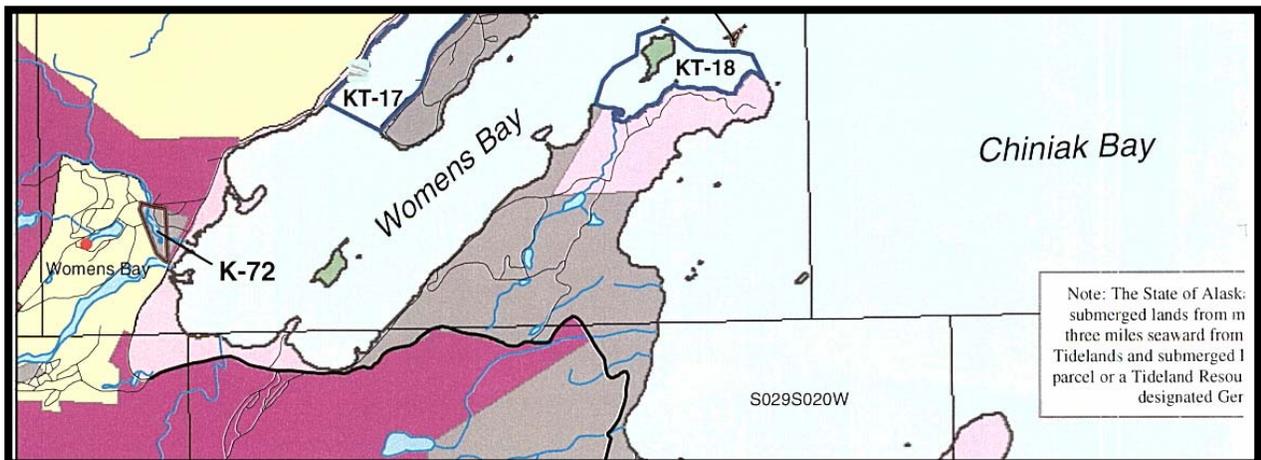
**K-37 Salonie Creek:** This area has been designated as Dispersed Recreation in its northern and western parts, essentially coinciding with the area affected by the

Natural Use zoning of the KIB. This zoning district limits most forms of development. The remainder of the parcel is designated as General Use, and managed for multiple uses.

**K-38 Raymond Peak:** This area immediately adjacent to the Kodiak Highway is designated Settlement and may be appropriate for disposal/development during the planning period, although immediate use of the parcel does not seem likely given other available land closer to the City of Kodiak. The remainder of the parcel is designated as General Use. Development in this area is not likely given its steep topography.

**K-39 Mayflower Creek:** This area immediately adjacent to the Chiniak Highway is designated Settlement (west of highway) and Dispersed Recreation (east of highway) and may be appropriate for disposal/development during the planning period, although immediate use of the parcel does not seem likely given other available land closer to the City of Kodiak. Disposals or development authorizations should protect the two anadromous streams.

**Map 8. State Area Plan - Sargent Creek**



**K-72 Sargent Creek:** If this state selected parcel is conveyed from the federal government, the state intends to manage it for public recreation purposes (Designation is Dispersed Recreation). Development authorizations are to be limited to those required for public safety purposes or for recreational management. Parcel is proposed to be retained in public ownership.

## I. Gravel Operations

Gravel mining operations in Bells Flats started in 1965. In a memorandum from Mike Brechan, of Brechan Enterprises, Inc. to the KIB Assembly, dated May 5, 1978, Mr. Brechan stated the following:

*“Our sand and gravel operations began on Upper Sargent Creek in 1965. We had made application on the tract we presently occupy on parcel P-1 to the Bureau of Land Management in 1966 which evolved to the (KIB) ordinance allowing us to lease that area from the Borough for the purpose of gravel production and our facilities for the hot plant. At the time of the inspection of the lease, the Borough recognized the need to supply a source of raw material for development in this community and it was my understanding that the lease fees and gravel charges were basically set up to cover the Borough's administrative cost for handling the leases, although the Borough recognized that gravel in its native form had some value. The original value placed on this material was 25 cents per cubic yard”.*

Brechan Enterprises, Inc. currently operates an asphalt and gravel mining operation at Bells Flats, under permits from the Kodiak Island Borough. The asphalt operation is located on a parcel owned by Brechan Enterprises. Four other parcel tracts, B-1, B-2, B-3 and B-4 totaling approximately 75 acres, are currently under lease from the KIB, and expire in 2007.

During 2004, Brechan Enterprises, Inc. had Northern Economics Inc. prepare an economic impact study of their operation in the Womens Bay. Copies of the study, Brechan Enterprises: Moving Cost Estimates, Economic Contribution to Kodiak, 2004 are available from the Brechan Enterprises' website at [www.brechanenterprises.com](http://www.brechanenterprises.com).

Since the initiation of gravel mining and processing on the B tracts in the Core Planning Area in 1965 Borough lands adjacent to the B tracts have been transferred through the land disposal process to private ownership and zoned residential (RR1). Development of this land for residential purposes has generated land use conflicts. In May 2006 the Assembly appointed a Gravel Task Force to investigate and report on [1] existing gravel sites, and [2] potential future gravel sites, and [3] estimated community need for gravel in future years, and [4] recommend policies to the Planning and Zoning Commission and the Assembly for the orderly development and long term availability of gravel and earth materials resources. The Gravel Task Force is continuing with this work. A semi-annual report summarizing the findings of the Task Force is included in the Appendix.

## J. Land Based Classification Standards

Land-Based Classification Standards (LBCS) provide a consistent model for classifying land uses based on their characteristics.

The LBCS approach for the WBC Plan maps has been utilized to achieve the following:

- a. Collecting current land-use data for the Womens Bay planning area.
- b. Applying consistent land use classifications so that the products and data may be shared between multiple users.
- c. Rendering land use information for visual representation and analysis through the use of standard color classifications.
- d. Documenting land-use data for future updating and tracking of land use changes.
- e. Organizing land use data so that vacant parcels can be identified and analyzed for their potential for development based upon current zoning classifications.

The LBCS standards are based on a multi-dimensional land-use model. For local planning purposes, LBCS calls for classifying land uses in the following dimensions: **activities**, **structure type**, and **site development character**.

### LBCS Activity

**Activity** refers to the actual use of land based on its observable characteristics. It describes what actually takes place in physical or observable terms (e.g. farming, shopping, manufacturing, vehicular movement, etc.). An industrial activity, for example, refers only to the physical activity on the premises, which could apply equally to a manufacturing facility or industrial facility. Similarly, residential uses in single-family dwellings, multi-family structures, manufactured structures, or any other type of building, would all be classified as residential activity.

### ***LBCS Activity - Activity Definitions:***

**Residential:** Includes activities that occur in all types of residential uses, structures, ownership characteristics, or the character of the development.

**Shopping/Business:** This category captures all uses that are business related. It is a catch-all category for all retail, office, commercial, and industrial activities when the subcategories are either too specific or otherwise unknown (as in comprehensive plan designations).

**Industrial/Manufacturing/Waste Related:** All manufacturing, assembly, warehouse, and waste management activities.

**Institutional/Social:** This category is for all institutional activities. This broad

category may also be used for land-use designations in comprehensive and general plans.

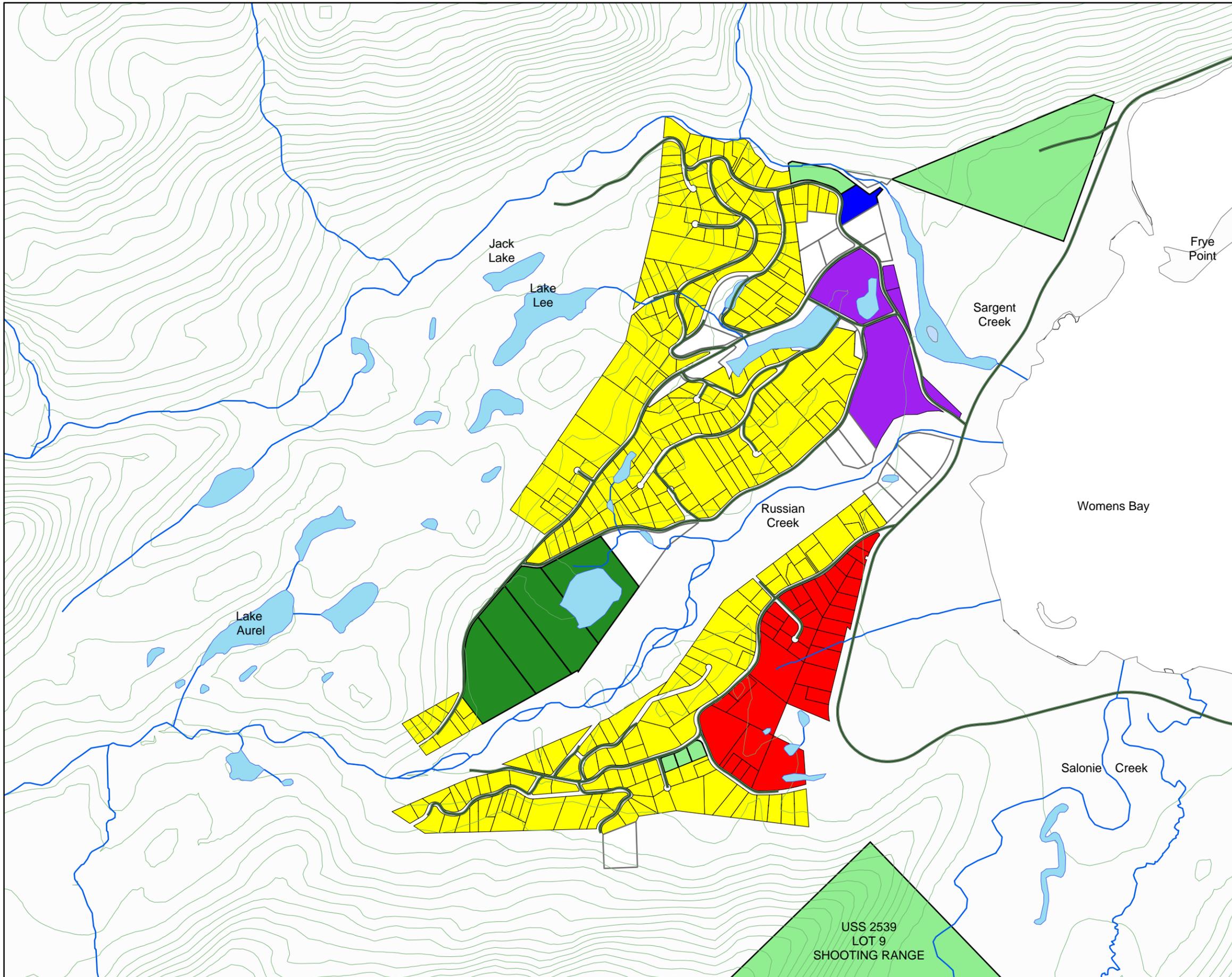
**Leisure:** This is a catch-all category for classifying all forms of leisure activities. It includes the customary active and passive kinds of leisure activities although such distinctions are difficult to define.

**Natural Resources:** This category relates to natural resources related activities.

**Unclassifiable:** This category is used as a temporary placeholder for activities that cannot be grouped anywhere until the classification scheme is updated.

# Womens Bay LBCS Activity

- Residential
- Shopping,Business
- Industrial/Manuf./Waste-related
- Institutional/Social
- Leisure
- Shooting
- Natural Resources
- Unclassifiable Activity
- stream
- kod\_contour
- roads



**MAP 9**  
Womens Bay  
LBCS Activity

Map prepared for the Womens Bay Comprehensive Plan Update, Jan. 2005.  
 Alaska Highway System, GPS centerline data, National Highway System, Highways, Roads, Streets., Alaska D.O.T. Sept. 2002  
 Contour information:USGS Digital Elevation Model Kodiak, Alaska  
 50 foot intervals, Scale is 1:63,360  
 Created in ArcGIS 9, NAD 27, State Plane 5  
 Parcel information is taken from selected fields in the current computerized property records in the Assessing Dept. This data has not been reconciled with data contained in manual files which may be more up-to-date.  
 Kodiak Island Borough  
 Community Development Department.

## **LBCS Structures**

**Structure** refers to the type of structure or building on the land. Land use terms embody a structural or building characteristic, which suggests the utility of the space (in a building) or land (when there is no building). Land use terms such as single-family house, office building, warehouse, firehouse, or highway also describe structural characteristics.

### ***LBCS Structures – Structure Definitions***

**Residential:** Includes single family, duplexes, manufactured housing, and multi-family and eight-unit dwellings.

**Commercial:** Structures that are used primarily for commercial, warehouse or storage or warehousing.

**Fire and Rescue Station:** The existing WBC Fire and Rescue Station.

**Utility:** Includes parcels with established use but no existing structures.

**Accessory Structures:** This category groups structures that are used as sheds, farm buildings or agricultural facilities, livestock facilities and stables and equine facilities.

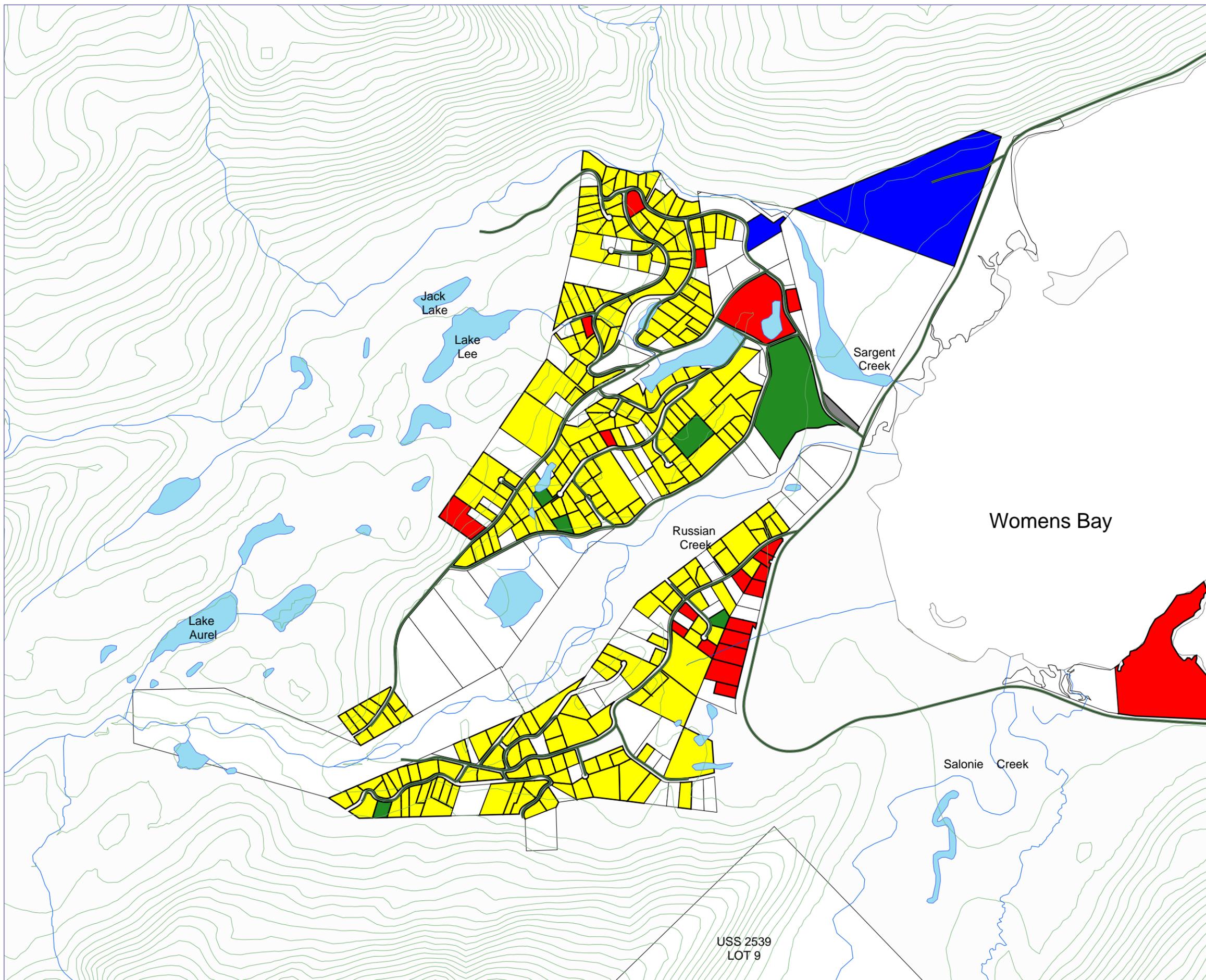
**Vacant Property:** Designated with no structure.

**Unclassifiable:** Includes all structures that cannot be included elsewhere. This category is intended as a temporary status until appropriate structure classification can be established.

# Womens Bay

## LBCS Structure

- Single Family
- Duplex
- Manufactured Housing
- Multi family
- Eight Units
- Commercial
- Warehouse/Storage
- Warehouse
- Other Community Structure
- Fire & Rescue Station
- Utility/nonbuilding
- Sheds/farm bldg/agric fac.
- Livestock Facility
- Stable/Equine fac.
- No Structure
- kod\_contour
- stream
- roads



MAP 10  
Womens Bay  
LBCS Structure

Map prepared for the Womens Bay Comprehensive Plan Update, Sept. 2004.  
 Alaska Highway System, GPS centerline data, National Highway System, Highways, Roads, Streets., Alaska D.O.T. Sept. 2002  
 Contour information:USGS Digital Elevation Model Kodiak, Alaska  
 50 foot intervals, Scale is 1:63,360  
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 Kodiak Island Borough  
 Community Development Department.

0      1,000      2,000      4,000

Feet

## **LBCS Activity and Structures – Vacant Properties**

**Site development character** refers to the overall physical development character of the land. It describes “what is on the land” in general physical terms. For most land uses, it is simply expressed in terms of whether the site is developed or not.

### ***LBCS Vacant Properties***

Map 11 LBCS Vacant Properties, represents a combination of Womens Bay core area parcels currently identified through the KIB Assessor’s database as vacant, and those parcels with either an accessory building or gear storage shed located on them (minor structural development), but no primary existing residential development. These parcels are considered to represent the total number of parcels remaining in the core planning area that are available for future development and fall into two land use types: Rural Residential and Business.

# Womens Bay

## LBCS Activity & Structure

- kod\_contour
- stream
- roads
- Vacant Parcels



**MAP 11**  
Womens Bay  
LBCS Vacant  
Properties

Map prepared for the Womens Bay  
Comprehensive Plan Update, Jan. 2005.  
Alaska Highway System, GPS centerline data,  
National Highway System, Highways, Roads,  
Streets., Alaska D.O.T. Sept. 2002  
Contour information:USGS Digital Elevation Model  
Kodiak, Alaska  
50 foot intervals, Scale is 1:63,360  
Created in ArcGIS 9, NAD 27, State Plane 5  
Parcel information is taken from selected fields  
in the current computerized property records in  
the Assessing Dept. This data has not been  
reconciled with data contained in manual files  
which may be more up-to-date.  
Kodiak Island Borough  
Community Development Department.

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# CHAPTER 3. DEVELOPMENT PATTERN

## **Section I. Community Preferences to Planning Issues**

The Kodiak Island Borough held an Open House on May 10, 2004, at Peterson Elementary School from 6 p.m. to 9 p.m. Approximately 50 people attended the Open House. The results for each alternative were computed by calculating the percentage of responses for each preference from Do Not Support through No Opinion. If a question was left blank, it was scored under the No Opinion column. (Complete survey is available in the appendix)

### **1. Land Use Issues**

Lands in the immediate WB community area are currently zoned industrial, business, rural residential (RR1), public use, conservation and natural use.

### **2. Natural Use Area**

A Natural Use Area ordinance was adopted in 1989 and portions of both Borough and State land in the Womens Bay Regional Planning Area were zoned Natural Use in 1989. An initial plan for the area was drafted in 1997, the Womens Bay Natural Use Area Plan, but it was never finalized, reviewed or adopted by the Borough Planning & Zoning Commission and Assembly.

### **3. Incorporation of the Womens Bay Community as a second-class city.**

The 1982 Womens Bay Comprehensive Plan considered the incorporation of Womens Bay into a second-class city.

### **4. Gravel Material Sources and Extraction**

Gravel mining operations in Bells Flats started in approximately 1965. Brechan Enterprises, Inc. currently operates an asphalt batch plant on land owned by Brechan Enterprises, Inc. along Sargent Creek Road, and gravel mining extraction operations in upper Bells Flats, under permit from the Kodiak Island Borough. The four tracts, B-1, B-2, B-3 and B-4 total approximately 75 acres. These four tracts are leased from the Kodiak Island Borough, and the lease expires in 2007. Gravel material is a critical Borough-wide need for roads and other forms of construction on Kodiak.

### **5. Public Health/Safety and Environmental Issues**

The WB residential community has experienced fluctuating growth patterns during the last 10 years. There are concerns related to public health and safety, such as adequate clean water and areas for current and future waste disposal. There are also environmental concerns such as water quality, ATV impacts, impacts from farm animals, close proximity of existing septic systems, erosion associated with Russian River and Sargent Creek drainages, and potential industrial pollution from former and existing industrial activities to name a few.

## **SECTION 2. DEVELOPMENT ALTERNATIVES**

In most planning endeavors there are alternative ways that growth and development may occur. The future growth and development of the Womens Bay area is no exception. This section identifies three alternative development patterns that could occur within the Womens Bay area and evaluates each relative to the issues raised and established in prior sections of this plan. This analysis resulted in the identification of a preferred development pattern that is discussed in greater detail in Section 3 of this chapter and that forms the basis for the implementation program described in Chapter 5 of this plan.

### **Continuation of Existing Trends (No Action Alternative)**

This alternative continues the existing development trends for the Womens Bay area. The characteristics of this trend include little or no new residential subdivision or construction within the community, very limited non-residential development, very limited public investment in infrastructure maintenance and expansion, limited public policy support for zone changes and development proposals, and limited opportunities for community participation in guiding future growth and development of the Womens Bay area.

Continuation of existing trends fails to achieve many stated public policy objectives and public investment expectations. This development alternative fails to promote the preferred development pattern that the community survey results indicate, fails to provide for continued viability of the rural community, and fails to provide a proactive role for the public in the revival of the community. This alternative provides few opportunities for property owners to achieve their visions of gaining returns on investments due in part to a lack of public support for needed infrastructure and continued uncertainty associated with the success of development proposals.

### **Dispersed Suburban Growth Pattern**

This alternative establishes a development pattern that disperses expanded growth throughout the entire community fueled by extension of public infrastructure and greater public policy support for zone changes and development proposals.

This pattern may be best described as one in which the public plays a role through investment in roads, sewers, waterlines, provision of fire protection and law enforcement, but with little to no authority to manage the location or type of growth occurring within the community. While this trend addresses the issue of encouraging additional growth within the rural community, it fails to address the preferred development pattern that the community survey results indicate and may compromise a number of private investment expectations. This development alternative undermines the traditional development pattern of the community, fails to enable wise management of public fiscal resources, minimizes the ability to protect the natural environment and fails to capitalize on existing public and private investments. This alternative creates an environment where conflicts between incompatible land uses may become more common, thus undermining property values and infringing upon residents quality of life and on some property owners' ability to continue rural activities.

## **Compact Rural Neighborhood Based Pattern**

This alternative establishes a pattern that promotes limited expanded growth and development in and around the main core areas of the community through the provision of public infrastructure and strong public policy support for zone changes and development proposals that are consistent with the support of the traditional rural residential development pattern. Further, this pattern envisions a strong role for community members in guiding the future growth and development of the community.

This trend increases the public's role in managing future growth and development and therefore limits the opportunities of some property owners. However, it is consistent with most of the preferred development pattern that the community survey results indicate, with the goals and strategies identified in this plan and supports the majority of private investment expectations. Further, this development pattern enables wise management of limited public fiscal resources, protects the natural and man-made environment, capitalizes on existing public and private investments, promotes growth and development within the rural community, and promotes a development pattern that is neighborhood-focused.

Through the active participation of community members in the implementation of this development pattern, limited expansions of development areas and as needed changes can readily be accommodated as appropriate and necessary. It is this development pattern that has been selected as the most appropriate for the Womens Bay community.

## **SECTION 3: PREFERRED DEVELOPMENT PATTERN**

As stated in the previous section of this Chapter, the development alternative that best adheres to the guiding principles as stated in the comprehensive plan and in this plan is the compact rural neighborhood based pattern. The following information provides more detail on the characteristics of this preferred development pattern.

### **Spatial Pattern** (See Recommended Land Use Map)

The preferred development pattern:

- Expands upon the traditional development pattern

- Separates rural residential areas from industrial areas with a discernible edge and buffer area

- Ensure that zoning districts are appropriate for an area that require on-site water and wastewater systems

Residential areas contained within the community should continue to grow at very low densities, allowing rural residential and agricultural opportunities in the areas surrounding the existing developed areas. Infrastructure extensions into the rural areas should be limited to those addressing health and safety issues such as replacement of failing on-site wastewater treatment systems and provision of public drinking water.

### **Neighborhood Pattern**

As the need for additional land becomes evident, new acreage should be added within the existing core areas, taking care to avoid environmentally sensitive areas and to continue to replicate the neighborhood pattern discussed within this section of the plan. Further, this avoids concentrating the land designated for residential development with one or two property owners.

Land located within the community that is constrained with significant natural features such as floodplain and wetlands should be placed within a rural conservation designation. These areas should not be further subdivided or developed. Lands located outside of the Womens Bay core planning area should continue to be rural in character. Infrastructure extensions into these areas should be very limited if made at all. The Jack and Lee Lakes Natural Use area should be maintained in its entirety in a natural state and use restricted to activities that do not degrade its natural and wild character.

Neighborhoods should remain large in scale, expand upon the traditional development pattern, be physically linked to other neighborhoods and to the two existing cores of the community via pathways, streets, etc., and contain a mix of uses where practical, with a continued emphasis on single family residences. Further, this pattern should include streets that are designed to serve the adjoining residences. Other features found within these neighborhoods should include connections into the trails network and shallow yard setbacks. Lot sizes should be kept to one acre or larger if needed to insure on site septic systems will function properly and not in the long term impair local ground water.

## **Business/Industrial Pattern**

The preferred development pattern continues to focus new business development in areas that have traditionally served such a purpose, though in an improved physical arrangement and a renewed emphasis on design and development standards. The community's business center will continue to be the area along Chiniak Highway. This area has traditionally focused on automobile oriented business activities such as gas stations, restaurants, convenience stores and limited retail business. This focus should continue, though over time, a mix of uses including office and professional services should be introduced in a well planned manner. Access management and design and development standards should be given a high priority as development and re-development occurs. A renewed interest in building design, building placement, lighting, landscaping, and signage is necessary to promote a more positive and aesthetically pleasing entrance into the Womens Bay community. Other business activities may be accommodated in a second location. This area should offer neighborhood services such as day care that are small in scale and compatible to the surrounding residential uses.

Basic employment opportunities in such activities as resource extraction will continue to be accommodated but in new locations outside of the immediate residential area. This recommendation is based on indications of existing conflicts between industrial uses and residential uses in the Core Plan Area. Existing industrial uses in the Core Planning Area should be phased out as opportunities for the relocation of such activities become available. Leases of Borough owned land for private industrial uses including gravel extraction should be granted for minimum duration terms, in the Core Planning Area. If existing industrial activities, including gravel extraction on Borough leased land are continued, lease agreements will contain operation stipulations to minimize impacts on near-by residential areas including limitations on hours and days of operation and permitted activities, No new industrial activities will be permitted in the Core Plan area. Industrial zoning will be permitted in areas of the Regional Planning Area outside of the Core Planning Area if such zoning is approved through the Borough zoning process.

## Chapter 4. Goals and Objectives

**Goals** are general achievements that the community wishes to accomplish in the future. Goals provide guidance for developing objectives.

**Objectives** are specific and achievable projects in support of a goal.

### Land Use

**Goal: Guide the use of land in the Womens Bay planning area in a manner that provides for orderly and compatible community and regional growth.**

**Goal: Maintain the rural residential setting of the Womens Bay Community.**

**Objectives:**

- a) Encourage new residential development while maintaining a minimum lot size of RR1 (40,000 square feet).
- b) Platted roads should be developed to Borough code prior to land sales.
- c) Support a centralized business and office use areas that follow the existing development pattern.

**Goal: Minimize conflict between different land uses within the Womens Bay Area.**

**Objectives:**

- a) Create a buffer zone between existing industrial and residential use areas.
- b) Develop light and noise standards for non-residential uses.
- c) Provide viable land uses for the Salonie Creek Area, including the feasibility of future recreational or resource extraction uses.

**Goal: Identify and designate areas for public access in Womens Bay.**

**Objectives:**

- a) Provide an area for public launch sites for skiffs and small pleasure craft.
- b) Provide public access to the shoreline for recreational purposes including skiffs and small pleasure craft.
- c) Support the KIB Parks and Recreation Committee's efforts to provide transportation trails for motorized and non-motorized vehicles (i.e. ATV trails, foot paths, bike paths, horse trails, etc.) in the planning area.
- d) Develop transportation trails for non-motorized vehicles (i.e. foot paths, bike paths, horse trails, etc.)

**Goal: Guide gravel material sources and extraction operations in the Womens Bay planning area that is mutually beneficial to residents and industry.**

**Objectives:**

- a) Conduct an industrial and resource extraction future needs analysis and site capability analysis to determine KIB land use supply and demand.
- b) Transition the location of industrial and gravel uses out of the immediate

- residential area.
- c) Regulate hours and days of operation and permitted activities to minimize conflicts with adjacent residential areas as provisions in lease agreements.

### **Jack and Lee Lakes Natural Use Area**

**Goal: Address and resolve user conflicts between motorized and non- motorized activities in the Jack and Lee Lakes Natural Use Area .**

**Objectives:**

- a) Change the area's name to Womens Bay Park or Jack and Lee Lakes Natural Use Park to help identify the area to Borough residents and visitors.
- b) Develop a park, trails, and recreation plan for the Jack and Lee Lakes Natural Use Area.

### **Public Health/Safety and Environment**

**Goal: Minimize development in environmentally sensitive area.**

**Objectives:**

- a) Maintain a high quality natural environment within the planning area.
- b) Rezone portions of the B Parcels to public use, natural use, or conservation areas zoning classification or possible residential use.
- c) Implement the Alaska Coastal Management Program and the Kodiak Island Coastal Management Program in planning for appropriate coastal zone uses.
- d) Protect the Russian River and Sargent Creek drainages by establishing specific strategies through coordination with state and federal regulatory entities.

**Goal: Ensure adequate public services for the Womens Bay planning area.**

**Objectives:**

- a) Identify and prioritize needed road improvement projects in the WBC.
- b) Provide better fire service in the planning area.
- c) Addresses problems associated with private water/sewer systems.
- d) Provide an upgraded emergency evacuation shelter and support emergency procedures education.
- e) Support positive bear management practices as described in the Kodiak Archipelago Bear Management Plan.
- f) Designate a suitable location for a community cemetery.
- g) Designate a suitable location for a community school.
- h) Improve waste collection and disposal – Provide a transfer station and recycling center to be located in the core area.

## Chapter 5. Plan Implementation

**Action:** Identification of the specific task to be accomplished.

**Funding Source:** Identification of possible funding sources to accomplish the task.

**Lead Department/Entity:** Which KIB entities and/or Departments will lead if the action is pursued.

**Time Frame:** What period could be estimated to accomplish the action. Ongoing means the action should be continually a priority for the KIB. Short term means the action could be accomplished with one year; mid-term means two to five years and long term means it would take over five years to accomplish the task.

### Land Use

#### **Goal 1. Maintain the rural residential setting of the Womens Bay Community.**

**Objective:** Encourage new residential development while maintaining a minimum lot size of RR1 (40,000 square feet).

Action	Funding Source	KIB Lead	Time Frame
Evaluate the need for a KIB zoning and subdivision code amendment that would address future lot sizes in the planning area based on natural constraints such as slope topography, soil and water availability and other conditions.	KIB	P&Z Comm., Community Development	Short-Term
Minimize development in rivers and creek flood plains, tsunami surge zones or at the bases of unstable quarry or mountain sides.	KIB Private	P & Z Comm., Community Development, Assessing	On-going

**Objective:** Platted roads should be developed to Borough code prior to land sales.

Action	Funding Source	KIB Lead	Time Frame
Evaluate the need for a KIB zoning and subdivision code amendment that would address new road improvement standards.	KIB	P&Z Comm., Community Development	Short-Term

**Objective:** Support a centralized business and office use areas that follow the existing development pattern.

**Goal 2: Minimize conflict between different land uses within the Womens Bay Area.**

**Objective:** Create a buffer zone between existing industrial and residential use areas.

Action	Funding Source	KIB Lead	Time Frame
Create buffer zones through rezone procedures between industrial and residential use areas.	KIB DCED ACMP	P&Z Comm., Community Development	Short-Term
Review and revise the I-Industrial zoning district to reflect more up-to-date standards for regulating industrial uses. The emphasis of this review should focus industrial uses within close proximity to residential uses.	KIB	P&Z Comm., Community Development	Short-Term

**Objective:** Develop light and noise standards for non-residential uses.

Action	Funding Source	KIB Lead	Time Frame
Research existing KIB ordinances to determine areas where amendments to existing standards would be appropriate.	KIB	P&Z Comm., Community Develop.	Mid-Term

**Objective:** Provide viable land uses for the Salonie Creek Area, including the feasibility of future recreational or resource extraction uses.

Action	Funding Source	KIB Lead	Time Frame
Research the feasibility and location of future gravel extraction operations in the Salonie Creek area.	KIB Industry	P&Z Comm., Community Development	Short-Term
Determine the management and future land uses of Borough-owned land in the Salonie Creek area, including the existing rifle range, to resolve any existing or future land use conflicts.	KIB Private	P & Z Comm. Community Development, KIB Parks and Recreation Committee	Short-Term
Investigate the feasibility of gravel extraction projects in the Russian River and Sargent Creek areas that address multiple management objectives including material extraction, habitat enhancement and floodplain improvements.	KIB Native Organizations Industry DNR ADF&G	Assembly, P & Z Comm., Community Develop., Assessing	Mid-Term

**Goal 3: Identify and designate areas for public access in Womens Bay.**

**Objective:** Provide public access to the shoreline for recreational purposes including skiffs and small pleasure craft.

Action	Funding Source	KIB Lead Department or Commission	Time Frame
Encourage the acquisition of private property to provide public access to the shoreline for recreational purposes and to provide areas for public launch sites for skiffs and small pleasure craft.	KIB ADF&G	KIB Assembly, P&Z Comm., Community Development, Engineering and Facilities	On-going

**Objective:** Support the KIB Parks and Recreation Committee's efforts to provide transportation trails for motorized and non-motorized vehicles (i.e. ATV trails, foot paths, bike paths, horse trails, etc.) in the planning area.

Action	Funding Source	KIB Lead Department or Commission	Time Frame
Encourage the KIB Parks and Recreation Committee and Planning & Zoning Commission to institute management strategies to eliminate conflicts among competitive recreational uses in the planning area.	KIB NPS	KIB Parks & Rec Comm.; P&Z Comm., Community Develop.	Short Term

**Objective:** Develop transportation trails for non-motorized vehicles (i.e. foot paths, bike paths, horse trails, etc.)

Action	Funding Source	KIB Lead	Time Frame
Support the KIB Parks and Recreation Committee's efforts to provide transportation trails for motorized and non-motorized vehicles (i.e. ATV's, foot paths, bike paths, horse trails, etc.) in the planning area.	KIB NPS	KIB Parks & Rec Comm.; P&Z Comm., Community Develop.	Short Term

**Goal 4: Guide gravel material sources and extraction operations in the Womens Bay planning area that is mutually beneficial to residents and industry.**

**Objective:** Conduct an industrial and resource extraction future needs analysis and site capability analysis to determine KIB land use supply and demand.

Action	Funding Source	KIB Lead	Time Frame
Research the feasibility, including opportunities and constraints, of alternative sites within the KIB for material extraction operations and related material industrial operations.	KIB Native Org., Industry DNR	Assembly, P & Z Comm., Community Develop., Assessing	Mid-Term

**Objective:** Transition the location of industrial and gravel uses out of the immediate residential area.

Action	Funding Source	KIB Lead	Time Frame
Research land ownership and existing land use on the “slaughterhouse property”	KIB DCED ACMP	Assembly, P&Z Comm., Community Development	Short-Term
Identify feasible sites for future material extraction within the Womens Bay planning area.	KIB Native Organizations Industry DNR	Assembly, P & Z Comm., Community Develop., Assessing	Mid-Term
Determine whether to phase out the current gravel leases on the B Tracts after the current leases expire. Leases should be renewed or new leases issued for minimum duration terms until a suitable alternative extraction site can be developed. Renewal or new lease agreements should specify operation hours, days of operation, and permitted activities to minimize conflicts with adjacent residences.  Review the depth of extraction identified in the current leases and ensure they are consistent with the local habitat need for anadromous water bodies.	KIB Industry	Assembly, P & Z Comm., Community Develop., Assessing	
Assess the feasibility of a future phased development utilizing existing water filled pits for fishery enhancement, and adjacent areas for park designation and possible residential lots post gravel extraction phase out.	KIB Industry ADF&G	Assembly, P & Z Comm., Community Develop., Assessing	Mid-Term

## **Jack and Lee Lakes Natural Use Area**

**Goal: Address and resolve user conflicts between motorized and non- motorized activities in the Jack and Lee Lakes Natural Use Area.**

**Objectives:** Change the area’s name to Womens Bay Park or Womens Bay Natural Use Park to help identify the area to Borough residents and visitors.

Action	Funding Source	KIB Lead	Time Frame
Research changing the area’s name to Womens Bay Park or Jack and Lee Lakes Natural Use Park to help identify the area to Borough residents and visitors.	KIB	P&Z Comm., Community Develop.	Mid-Term

**Objectives:** Develop a park, trails, and recreation plan for the Jack and Lee Lakes Natural Use area.

Action	Funding Source	KIB Lead	Time Frame
Analyze and evaluate the zoning code for the natural use area to determine if a zoning code amendment is necessary.	KIB	P&Z Comm., Community Develop.	Mid-Term
Research the KIB subdivision code and other potential mechanisms to provide for community-wide green space and usable public recreational use areas in future subdivisions in the planning area.	KIB	KIB Parks & Rec Comm., P&Z Comm., Community Develop.	Mid-Term
Identify and map the approved 17b easements that provide public access through native owned land in the study area.	KIB	KIB Parks & Rec Comm., P&Z Comm., Community Develop.	Mid-Term
Investigate the potential for an “off-road vehicle” park or use area in an appropriate location outside of the Womens Bay community and outside of the Natural Use zoning district.	KIB	KIB Parks & Rec Comm., P&Z Comm., Community Develop.	Long-Term

## **Public Health/Safety and Environment**

**Goal 1: Minimize development in environmentally sensitive area.**

**Objectives:** Maintain a high quality natural environment within the planning area.

<b>Action</b>	<b>Funding Source</b>	<b>KIB Lead</b>	<b>Time Frame</b>
Determine if a zoning code amendment is needed to protect natural resources from potential adverse impacts from boarding of large animals.	KIB DCED ACMP	P&Z Comm., Community Development	Short-Term
Provide comprehensive land, air and water policies, uses, and zoning recommendations for the land and waters within the Womens Bay planning area.	KIB DCED ACMP State/Federal agencies.	P & Z Comm., Community Development	On-going
Minimize development in rivers and creek flood plains, tsunami surge zones or at the bases of unstable quarry or mountain sides.	KIB Private	P & Z Comm., Community Development, Assessing	On-going
Encourage land owners to seek U.S. Army Corp. of Engineers assistance in cleaning contaminated former military dump sites.	KIB DCED State/Federal agencies.	Community Development	On-going
Develop a solid waste transfer station and recycling center in the Womens Bay Core Area.	KIB ADEC	Engineering and Facilities, Community Development	Long Term

**Objectives:** Rezone portions of the B Parcels to public use, natural use, or conservation areas zoning classification or possible residential use.

<b>Action</b>	<b>Funding Source</b>	<b>KIB Lead</b>	<b>Time Frame</b>
Create buffer zones through rezone procedures between industrial and residential use areas.	KIB DCED ACMP	P&Z Comm., Community Development	Short-Term

**Objectives:** Implement the Alaska Coastal Management Program and the Kodiak Island Coastal Management Program in planning for appropriate coastal zone uses.

Action	Funding Source	KIB Lead	Time Frame
Support the update to the Kodiak Island Coastal Management Plan (KIB CMP) in planning for appropriate coastal zone uses in the WB planning area.	KIB DCED ACMP State/Federal agencies.	P & Z Comm., Community Development	On-going

**Objectives:** Protect the Russian River and Sargent Creek drainages by establishing specific strategies through coordination with state and federal regulatory entities.

Action	Funding Source	KIB Lead	Time Frame
Coordinate a multiple organizational management system to protect the Russian River and Sargent Creek drainage areas through the creation of greenbelt.	KIB DCED ACMP State/Federal agencies.	P & Z Comm., Community Development	Mid-Term
Support a hydrological study for the Womens Bay drainage as it may have been impacted by the leasing of the B-Tracts.	KIB DCED ACMP State/Federal Agencies.	P & Z Comm., Community Development	Long-Term

**Goal 2: Ensure adequate public services for the Womens Bay planning area.**

**Objectives:** Identify and prioritize needed road improvement projects in the WBC.

Action	Funding Source	KIB Lead	Time Frame
Encourage and support the WB Service District's identification and analysis of road, water, sewer, and other utility issues and concerns.	WB Service District	Eng. And Public Facilities, Service District, Community Development	Mid Term
Investigate the potential for a new community school to be located in the Womens Bay community.	KIB/DEED	Eng. And Public Facilities, Service District, Community development.	Long Term

**Objectives:** Provide better fire service in the planning area.

Action	Funding Source	KIB Lead	Time Frame
Provide adequate funding for improved emergency services, including fire service and equipment.	WB Service District	Eng. And Public Facilities, Service District, Community Development	Mid Term

**Objectives:** Addresses problems associated with private water/sewer systems.

Action	Funding Source	KIB Lead	Time Frame
Research the locations and condition of individual on-site wells and septic systems in the core planning area to determine the potential future need for community water and sewer facilities.	KIB Denali Comm. ADEC	Community Development, Womens Bay Service District	Short-Term
Encourage and support the WB Service District's identification and analysis of road, water, sewer, and other utility issues and concerns.	WB Service District	Eng. And Public Facilities, Service District, Community Development	Mid-Term
Protect the watershed so that in the future it can support, if necessary, a municipal water system to facilitate future growth.	KIB ADEC Private	Community Development, Assessing	Long Term
Support the acquisition of the USCG lands between Sargent Creek and the Kodiak State Fairgrounds for a possible gravel extraction site.	KIB ADEC USCG	Community Development, Assessing	Mid-Term

**Objectives:** Provide an upgraded emergency evacuation shelter and support emergency procedures education.

Action	Funding Source	KIB Lead	Time Frame
Retain KIB lots along Sargent Creek for uses such as the fire hall, community center, emergency shelter, and public park lands.	KIB	Community Development, Womens Bay Service District	Short-Term
Establish and maintain tsunami warning sirens, tsunami evacuation plans and the location of pertinent informational signs.	ADES KIB	Coord. with Public Safety and WB Service District	Mid-Term
Investigate the potential for a new bridge over the Russian Creek to connect the two main development areas.	WB Service District	Eng. And Public Facilities, Service District, Community Development	Long-Term
Research other potential escape routes that could serve the Womens Bay planning area.	ADES KIB	Coord. with Public Safety and WB Service District	On-going
Provide adequate funding for improved emergency services, including fire service and equipment.	KIB Service District	Eng. And Public Facilities, Service District, Community Development	Mid Term

**Objectives:** Support positive bear management practices as described in the Kodiak Archipelago Bear Management Plan.

Action	Funding Source	KIB Lead	Time Frame
Ensure that the Kodiak Archipelago Bear Management Plan is consulted for all development projects.	KIB	Eng. And Public Facilities, Service District, Community Development	Long-Term

**Objective:** Designate a suitable location for a community cemetery.

Action	Funding Source	KIB Lead Department or Commission	Time Frame
Review PL-Public Use Land for a suitable or appropriate site for a new cemetery. Consider amending zoning districts to allow cemetery use.	Private/KIB	P&Z Comm., Community Development	On-going

## Chapter 6. Recommended Land Use Map

### LAND USE POLICIES

This chapter presents policy statements for each land use category. The Recommended Land Use Map, (Map 12), is on page 48. Each land use category has different characteristics and considerations that must be brought into focus in order to provide for effective and reasonable Plan implementation through public investment, zoning and other regulations.

#### Public Open Space

Public open space areas are comprised of public parks, natural areas, greenway paths and existing major public opens spaces and recreational areas in the Womens Bay Planning Area. These public open spaces receive heavy recreational usage during all seasons of the year. Hunting, hiking, fishing, camping and picnicking opportunities draw many visitors to the Kodiak Island Borough who contribute to the local economy. These public open space areas will continue to play an important role in serving the Womens Bay residents and the local tourism economy. The Plan identifies about 90 acres of public use land zoning as well as park areas.

Floodplains, riparian areas, steep slopes, wetlands and water supply watersheds are environmentally sensitive areas and carry inherent development constraints if they are to continue to function in their essential roles as part of the natural environment. Environmental protection overlay districts should be established for these areas. The Plan adopts the value that these special environments should be reserved and remain undeveloped and undisturbed, with the exception of non-invasive recreational uses. The Plan recognizes that all economic and recreational needs of Borough residents and property owners can be adequately accommodated on other accessible lands not impacted by such environmental features. Where public improvements are considered, the development of these improvements should be handled with great care and public scrutiny. The Plan supports conservation of these environmental resources through public reservation, regulation and, where necessary, acquisition.

#### Industrial

This category is intended for economic uses that result in increased jobs and tax base to the Womens Bay area and the Borough as a whole. This category should include industries and distribution/warehouses that are not generally compatible with residential uses typically found in suburban areas. Four criteria guide the location of large tract industrial uses: transportation access, water supply, lack of incompatible existing land use and topography. An area of approximately 45 acres is recommended as an excellent location for employment uses. Prime roadway access in this area provides great connections to business centers throughout and beyond the region.

A number of natural gravel deposits exist in the Womens Bay Planning Area. Such quarries should also be protected from encroachment by incompatible land uses that may be sensitive to the blasting, dust and heavy trucking operations. Areas around quarries where active blasting is occurring or may occur should be reserved for one of the following use categories: agriculture, industrial, or public open space. Resource Extraction uses include all uses associated with the operation of quarries, such as the

extraction, storage, processing and transportation of the quarry product.

### **Business**

The character of the category is defined as that which is primarily intended to meet the essential business needs and convenience of Womens Bay area residents. Commercial uses may include a grocery, drug store, and branch dry cleaning establishments as examples. Compatible small-scale industrial uses can also be located in these areas. Business uses should be placed into cohesive groupings rather than on individual properties along the highways and access control should be emphasized. Its purposes are: to encourage the development of groups of nonresidential uses that share common highway access and/or provide interior cross access in order to allow traffic from one business to have access to another without having to enter the highway traffic; to discourage single family residential uses; to protect environmentally sensitive areas, and to maintain the character of the surrounding neighborhoods. Opportunities for business uses, such as, small-scale shops, home occupations and cottage industries, may be appropriate outside these areas as well.

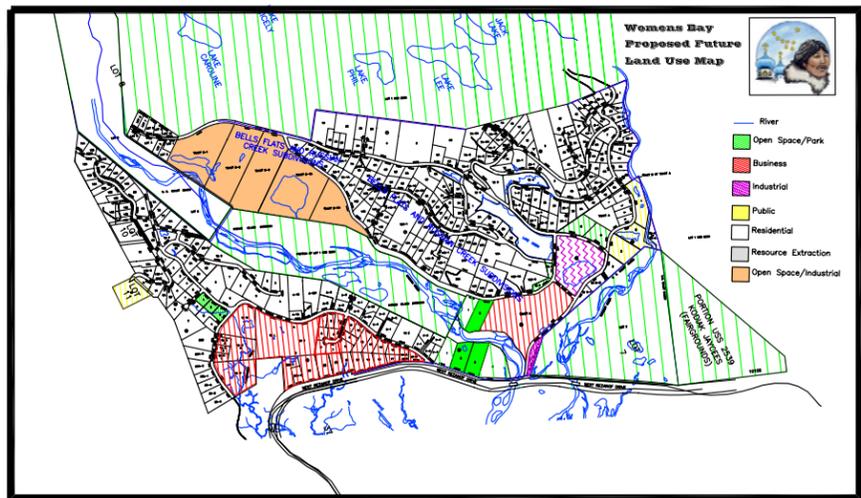
### **Residential**

The new residential development should be at a minimum lot size of RR1 (40,000 square feet) for existing lots. Other residential uses are also encouraged within this land use category at a density appropriate to ensure adequate water supply and wastewater treatment on-site. The mix of dwellings should be organized into a rational development pattern, rather than random lot-by-lot development.

The B tracts would be converted into Open Space land and some potential residential development sites. It is not encouraged to develop residential uses adjacent to the B tracts if the industrial uses remain for the long term in their present location as this is contradictory to the objective of buffering residential uses from industrial uses.

### **Institutional**

This category is defined as that which is primarily intended to accommodate uses of a governmental, civic, public service, or public institutional nature, including major public facilities, public utilities, and local government-owned property.

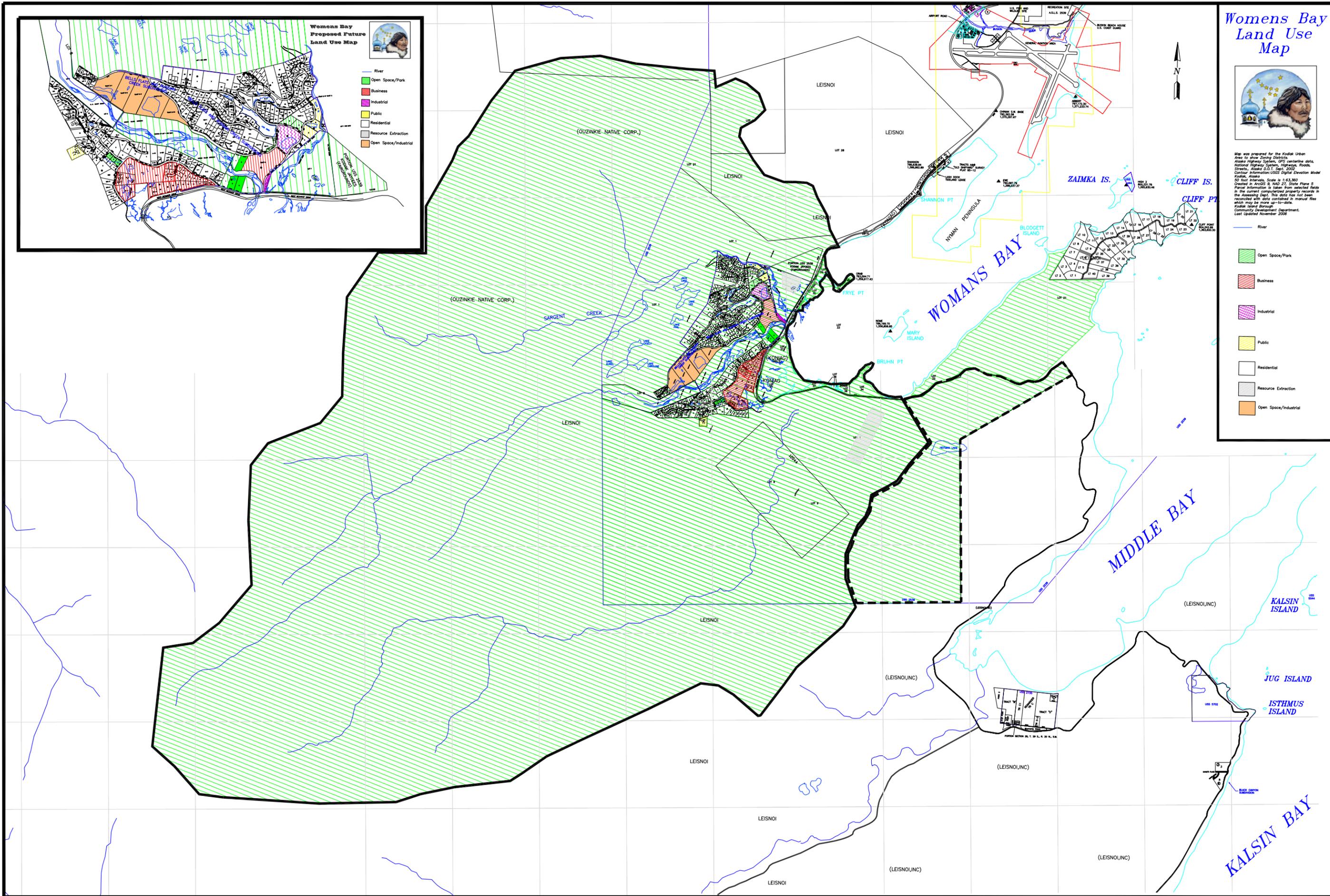


# Womens Bay Land Use Map



Map was prepared for the Kodiak Urban Area to show Zoning Districts, Alaska Highway System, GPR centerline data, National Highway System, Highways, Roads, Streets, Alaska D.O.T. Sept. 2002. Contour Information: USGS Digital Elevation Model Kodiak, Alaska. 50 Foot Intervals. Scale is 1:63,360. Parcel information is taken from selected fields in the current computerized property records in the Assessing Dept. This data has not been reconciled with data contained in manual files which may be more up-to-date. Kodiak Borough Community Development Department. Last Updated November 2006.

- River
- Open Space/Park
- Business
- Industrial
- Public
- Residential
- Resource Extraction
- Open Space/Industrial



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