
Chapter 2

RESOURCE SUMMARY

Land ownership

There are approximately 36,030 acres in the Kashwitna Unit. About 29,550 acres are state land, 6,090 acres are borough land, and 390 acres are private land (see Map 2). Proposed agricultural homesteads will transfer about 640 acres of state land to private ownership in Subunit c subject to covenants on agricultural use and development (11 AAC 67.154).

Agriculture

DESIGNATIONS AND EXISTING USE

Agriculture for small farms is the primary use in Subunit c. Two 160-acre agricultural homesteads exist in Subunit c (see Map 3) and portions of up to eight more parcels are proposed for sale in or after 1992 (see Chapter 3, Agriculture).

RESOURCES AND POTENTIAL

Detailed soil surveys are available for the parts of the Kashwitna Unit in T21N R4W, T20N R4W, and T20N R3W section 31. Within these areas, which are mostly borough land, about 60% of the soil is rated class III or IV under the current survey, and 40% is rated class V or worse. Less than 1% is rated class II.¹ Class II, III, and IV soils are rated suitable for annual crop production.

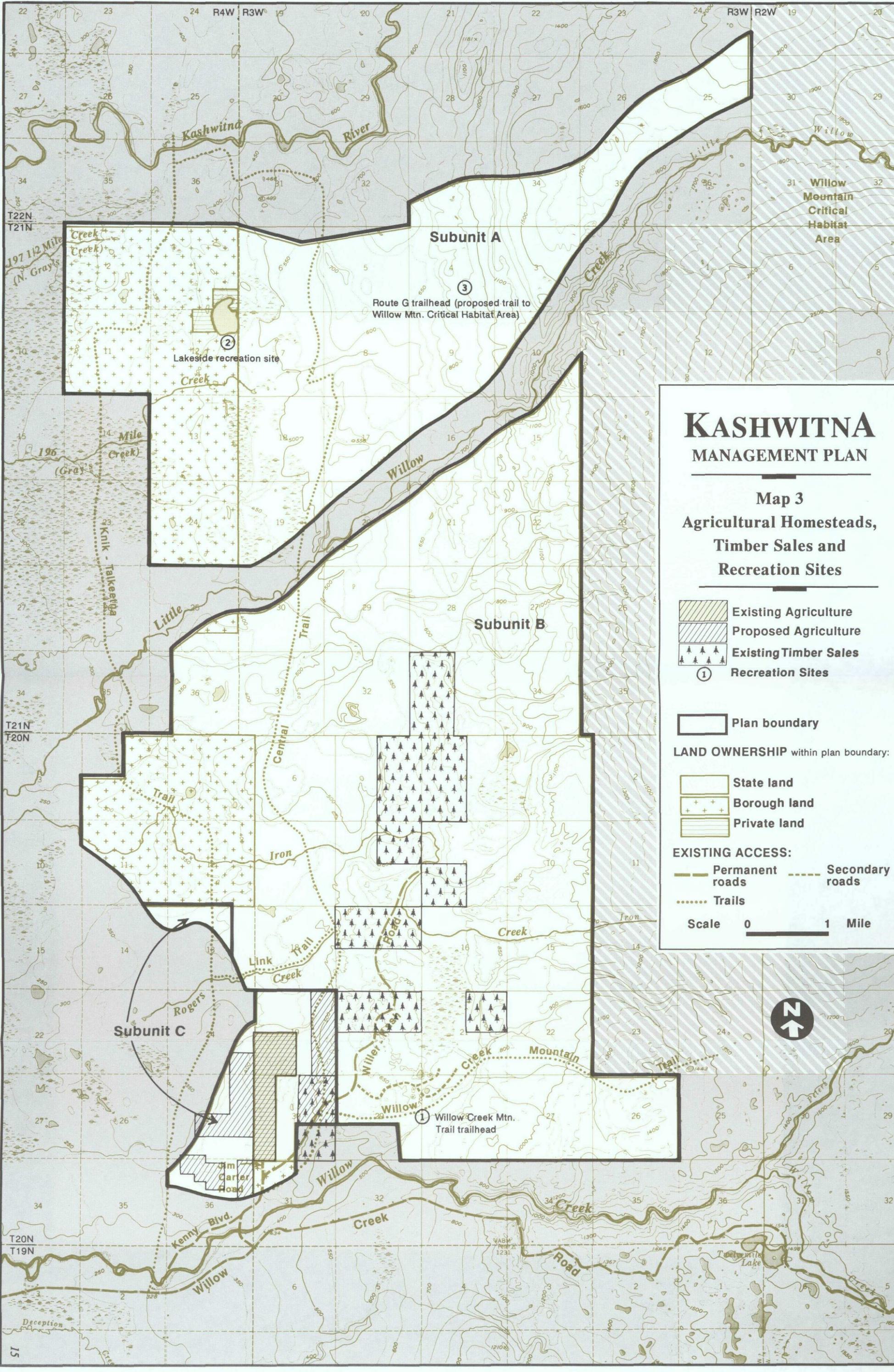
Currently, the remainder of the Kashwitna Unit is covered only by the Exploratory Soil Survey. Most of the unit is categorized as association SO1² in the statewide Exploratory Soil Survey.³ The description of this association states:

In general, the well drained soils on nearly level to rolling uplands are potentially suitable for cultivation or forestry. They have few limitations for roads, structures, and other intensive uses. Many of the other soils, however, have one or more restrictive features, such as a high water table, periodic flooding, steep slopes, poor stability, slow permeability, and stoniness, that severely limit their potential for use.

¹The USDA Soil Conservation Service is updating soil classifications in this area and expanding the area covered by detailed soil survey. In many areas the new classifications will lower the soil rating.

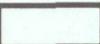
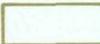
²Association SO1 is "Typic Cryothods, loamy, nearly level to rolling-Sphagnic Borofibrists, nearly level association."

³USDA Soil Conservation Service. 1979. Exploratory Soil Survey of Alaska. Anchorage, AK. 213 pp. + maps.



KASHWITNA MANAGEMENT PLAN

Map 3
Agricultural Homesteads,
Timber Sales and
Recreation Sites

 Existing Agriculture
 Proposed Agriculture
 Existing Timber Sales
 Recreation Sites
 Plan boundary
LAND OWNERSHIP within plan boundary:
 State land
 Borough land
 Private land
EXISTING ACCESS:
 Permanent roads
 Secondary roads
 Trails
 Scale 0 1 Mile

The USDA Soil Conservation Service conducted additional field work in the planning area in 1990. The new data will provide more detailed soil information for the Kashwitna Unit. Maps of this information will be available in 1991.

Fish and Wildlife Habitat

DESIGNATIONS AND EXISTING USE

Fish and wildlife habitat is a primary designation in subunits a and b, and a secondary use in Subunit c. In the last five years, the Kashwitna Unit has become increasingly important for sport hunting for moose. It is adjacent to the Willow Mountain Critical Habitat Area which supports a high-density moose population, there is recently developed access, and the area is close to urban population centers. Increasing use of off-road vehicles adds to the importance of this area. Since 1983 approximately 100 hunters reported spending 520 user-days harvesting an average of 35 moose per year in the Little Willow Creek harvest reporting unit. However, these estimates include lands outside the Kashwitna Unit.

RESOURCES AND POTENTIAL

Moose are widely distributed throughout the Kashwitna Unit, and, because of their great recreational, aesthetic, and subsistence values, are recognized as one of the most economically important species in the planning area. Moose numbers throughout the area vary greatly depending on the season, climatic conditions, and local factors, such as the availability of suitable cover habitat, the quantity and quality of preferred browse species (willow, birch, aspen, and cottonwood), and the diversity and interspersion of important habitat types. In winter, an estimated 250-350 moose inhabit the planning area. The timing and magnitude of winter moose utilization of the Kashwitna Unit probably depends on snow depths in the surrounding area, especially the alpine and subalpine habitats on Willow Mountain.

Most of the planning area is intensively used by moose in the winter. Many moose from the Willow Mountain area retreat to the protected forest cover types in the Kashwitna Unit. Much of the area between Little Willow Creek and the Kashwitna River (Subunit a) is an important concentration area in the fall prior to rut, and in the spring. The riparian habitats along Little Willow Creek are heavily used in the winter and are migration corridors during spring and fall. There is important calving habitat on the margins of wetlands and riparian areas.

The Department of Fish and Game believes this area has high potential for moose habitat enhancement if managed accordingly. Apparently, in the late 1920s, partly as a result of widespread fire, this was some of the most productive moose habitat in the entire Susitna River valley. Movement data from radio-collared moose indicate that in addition to moose coming from Willow Mountain, some moose migrate to this area from seasonal ranges on the west side of the Susitna River. This behavior is thought to represent past movement patterns of a greater segment of the population than at present and reflects a response to the availability of higher quality habitat in previous years.

Black bears are found throughout the planning area but are more closely associated with forests. They favor open to partially-open forests with an understory of fruit-bearing shrubs and herbs, lush grasses, and succulent forbs. Black bears tend to avoid expansive, open areas. The geographical distribution of bears is primarily determined by the availability of preferred food resources. In the spring, upon den emergence, black bears forage on new green vegetation or roots. During moose calving season, bears eat newborn moose or moose